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ABSTRACT

Objectives of the official comprehensive outdoor recreation plan for the State of Mississippi are (1) to guide recreational development in Mississippi in an orderly fashion on a statewide level; (2) to survey public, semipublic, commercial, and private outdoor recreational opportunities; (3) to determine recreational needs for meeting present and future demand; (4) to develop minimum standards for recreational development; and (5) to develop a 5-year action program for acquisition and development of lands and waters. The plan has encompassed (1) examination of planning objectives, legal authority to participate in the Land and Water Conservation Fund Program, participation in the planning process, and coordination with related plans and programs and (2) description of state delineation of recreational responsibilities and special problems. Demand, supply, needs, and the program for implementation are the primary elements of the plan and are treated in detailed description with illustrations. (JH)

ED0 56814

# MISSISSIPPI STATEWIDE COMPREHENSIVE OUTDOOR RECREATION PLAN

U.S. DEPARTMENT OF HEALTH,
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STATE OF MISSISSIPPI
EXECUTIVE DEPARTMENT
JACKSON 39205

JOHN BELL WILLIAMS
GOVERNOR

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August 11, 1969

Mr. Roy K. Wood, Regional Director
Southeast Regional Office
Bureau of Outdoor Recreation
810 New Walton Building
Atlanta, Georgia 30303

Dear Mr. Wood:

Pursuant to former Governor Paul B. Johnson's Executive Order No. 2 dated February 26, 1965, the Mississippi State Park System is submitting the Mississippi Comprehensive Outdoor Recreation Plan.

As Governor, I have approved this Plan as the official plan for the development of Mississippi's outdoor recreation resources.

Yours very truly,

John Bell Williams

John Bell Williams
Governor

**Mississippi Park System**
2906 NORTH STATE • JACKSON, MISSISSIPPI 39216

*A Year Round Vacation Land for Family Fun*

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August 5, 1969

Honorable John B. Williams
Governor, State of Mississippi
New Capitol Building
Jackson, Mississippi 39202

Dear Governor Williams:

We are pleased to submit herewith the Statewide Comprehensive Outdoor Recreation Plan for Mississippi for your consideration and requested approval. This Plan has been prepared by the Mississippi Research and Development Center under contract with the Mississippi Park System.

The Plan is one step in a continuing planning operation to provide the guidelines for the development and improvement of outdoor recreation opportunities in Mississippi. It is expected that major revisions and updatings of the Plan will follow as the acquisition of additional information and the analyses of trends and activities provide better and more accurate data for long-range planning. This Plan should be acknowledged by the various state agencies having to do with outdoor recreation and by the Federal government as furnishing the guidelines for continuing and coordinating the development of our outdoor recreation resources.

The recommendations presented in this Plan point out that Mississippi has a tremendous task ahead. The governments of the State and its various agencies and of the counties and municipalities, and the semi-public and private interests of the State, along with the Federal government, must be willing to share in the job of fulfilling the outdoor recreation needs and desires of Mississippians and of out-of-state visitors.

We urge your prompt consideration and approval of this Plan and your continued support for the development of outdoor recreation opportunities in our State.

Sincerely,

Spencer E. Medlin

Spencer E. Medlin, Comptroller
Mississippi State Park System

SEM:md

MISSISSIPPI
RESEARCH AND DEVELOPMENT CENTER

August 1, 1969

Mr. Spencer E. Medlin, Comptroller
Mississippi State Park System
Room 502, Milner Building
Jackson, Mississippi 39201

Dear Mr. Medlin:

We are pleased to submit the Statewide Comprehensive Outdoor Recreation Plan for Mississippi, prepared by our Community Development and Planning Division, for the consideration and approval of the Mississippi Park System.

We believe this plan represents the vehicle by which a coordinated program can be instituted to provide for the outdoor recreation needs of Mississippi. We trust that the plan will receive prompt consideration and approval and that it will be forwarded to the Governor for his consideration and approval.

Sincerely,

Kenneth C. Wagner

Kenneth C. Wagner
Director

KCW:md

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# MISSISSIPPI STATEWIDE COMPREHENSIVE OUTDOOR RECREATION PLAN

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Prepared under Contract with
MISSISSIPPI PARK SYSTEM
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MISSISSIPPI RESEARCH AND DEVELOPMENT CENTER
787 LAKELAND DRIVE · JACKSON, MISSISSIPPI

DECEMBER 1969

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Mississippi County Boards of Supervisors
Farmers Home Administration (U. S. Department of Agriculture)
Mississippi Agricultural and Industrial Board
Mississippi Air and Water Pollution Control Commission
Mississippi Board of Water Commissioners
Mississippi Boat and Water Safety Commission
Mississippi Cooperative Extension Service
Mississippi Department of Archives and History
Mississippi Forestry Commission
Mississippi Game and Fish Commission
Mississippi Gulf Coast Regional Planning Commission
Mississippi Highway Department
Mississippi Park System
Mississippi State Board of Health
Mississippi State Department of Education
Municipal Officials
National Park Service (U. S. Department of the Interior)
North Delta Economic Development District
Pat Harrison Waterway District
Pearl River Valley Water Development District
Pearl River Valley Water Supply District
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Southwest Mississippi Economic Development District
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Tennessee Valley Authority
Tombigbee River Valley Water Management District
U. S. Army Corps of Engineers, Mobile, New Orleans, and Vicksburg Districts
U. S. Fish and Wildlife Service (Department of the Interior)
U. S. Forest Service (Department of Agriculture)
Yellow Creek Watershed Authority

## Summary of Findings and Recommendations

The Mississippi Comprehensive Outdoor Recreation Plan has examined planning objectives, legal authority in the State of Mississippi to participate in the Land and Water Conservation Fund Program, participation in the planning process, coordination with related plans and programs, description of State delineation of recreational responsibilities, and special problems. Demand, Supply, Needs and the Program for Implementation, which are the primary elements in this Plan, are treated in detailed description and illustrations.

Population distribution within the State varies both in density and racial composition. The major portion of the State's population is concentrated in the central and southern parts of the State, while the largest percentage of nonwhites are found in the Delta and in the southwestern sections of the State.

Mississippi, in the past, has experienced a relatively slow population growth rate in comparison to the national rate and was virtually stagnant from 1940 to 1960. Since 1960, however, population has been steadily increasing and is projected to continue increasing.

Mississippi's population is rapidly becoming more urbanized although the State is still predominantly rural. This statement has two important implications for recreational development. Present participation patterns show a predominance of such activities as hunting, fishing, and picnicking. However, plans for the future must consider activities which are increasing with rapid urbanization of the State – camping, hiking, boating, and participation in outdoor games.

Mississippi has a distinctively young population with a larger percentage of the people in the under 15 age group than the U. S. average and fewer people in the 15 and older age group. In 1960 the median age of Mississippi's population was 24.2 and the United States median age was 29.5.

In the past Mississippi's economic and social structure has been heavily oriented toward agriculture which in turn relied on large numbers of low-wage farm laborers. With mechanization, improved farming techniques, and acreage limitations, the unskilled farm laborer was displaced with no alternative source of employment. As a result, there was a mass migration from the State until about 1960, when changes started taking place in Mississippi's economy. A definite trend has been established toward economic and cultural standards which provide an improved urban civilization and a better standard of living for all Mississippians.

Income levels and leisure time are increasing in the State, primarily due to the economy changing from agriculture to industry and service related fields. Nonresident use of recreation facilities is increasing and tourism depends primarily on varying types of recreation that are available. Mobility of both resident and nonresident population is steadily increasing. Two areas, the Great Lakes and the Mississippi Gulf Coast, are experiencing a heavy out-of-state visitation.

One of Mississippi's greatest assets for outdoor recreation is a generally warm and pleasant climate. It is classified as "sub-tropical," with a mean July temperature of 82° and a mean January temperature of 48°. Mean July temperatures vary little across the State, but mean January temperatures range from 53° on the Gulf Coast to 43° across the northernmost part of Mississippi.

Mississippi offers numerous recreational opportunities although there is a great need to make these opportunities more accessible and usable. A total of 3,640,699 acres of land, wetlands, and water is available for recreational use. The bulk of this acreage – 3,255,710 acres – is included within the National Forest and Wildlife Management areas or is public water acreage and is classified as Class III, Natural Environment Areas. Developed acreage for recreation provided by all levels of government and the private sector amounts to only 74,303 acres (or 31.5 acres per 1,000 population).

Despite the seemingly enormous amount of land and water, three obstacles prevent its full utilization – distribution, accessibility, and development. Although the national forests generally are well distributed across the State geographically, many State Parks are not well located with respect to population concentrations. Most of the available land and water is concentrated into a few large units more than 30 minutes' driving time from population centers. Access to much of the available land and water is inadequate. Even those areas not well located with respect to the population they should serve would provide more opportunities for recreational use if they were made conveniently accessible through the provision of roads, trails, and boat launching facilities. Also, most of the existing recreation areas are underdeveloped.

The organizations and individuals that provide semipublic, commercial, and private areas and facilities play a vital role in meeting the demand for outdoor recreation participation in Mississippi by providing 1,294,362 acres of land. The developed nonpublic 23,197 acres of recreation land are only 9,000 acres less than the combined developed area acreage provided by the State, Federal, and local governments. A large percentage of this acreage is in church camps, youth camps, and country clubs, with the remainder in commercial and private facilities concentrated around recreational areas throughout the State. The nonpublic sector also provides 1,271,165 acres of natural environment lands, which is primarily used by hunting and fishing clubs.

Each district of the State has several existing resources which could be made more accessible and more usable, and thereby more effective. Although development is the major need, Mississippi also has a need for land acquisition in locations near population concentrations. In general, recreation areas have not been located with consideration of population density and use pressure.

Of the 12 recreation districts in Mississippi, three have obviously greater quantity needs for recreational development. The Gulf Coast District, the second most populous district in the State and the most urbanized, has the greatest tourist demand, with out-of-state recreation participants coming from three large urban areas just outside of Mississippi – New Orleans, Baton Rouge, and Mobile. Population is projected to double in this district from 1960 to 1985. The Great Lakes District has a large amount of out-of-state use, especially from the Memphis area, as most of the large reservoirs are located in close proximity to Interstate 55 leading out of Memphis. The West Central District, which includes Jackson and Vicksburg, is the most highly populated district. The urban concentration at Jackson, especially, needs more recreation facilities.

Many of the State's facilities and areas are unevenly concentrated within a few districts. For example, over one-half of the cabin and motel units are in the Great Lakes District with the quality of cabins poor overall. Almost 90% of the beach acreage is along the Gulf Coast. Two-thirds of the marinas are in the Gulf Coast District. One-fourth of the boat launching ramps are in the Gulf Coast District. One-half of the group shelters and pavilions are in two districts, Great Lakes and West Central.

Acreage figures for many of the recreation categories show a supply of between 25% to 50% of the indicated needs based on standards for 1968. Only three acreage categories fall outside of this range. (Federal and regional acres are less than 25% and city acres are above 50%.)

Based on the Mississippi Recreation Survey, the average total number of activity days per person in the State of Mississippi on an annual basis equals 113.9 days. Based on the survey, total activity occasions of Mississippi produced a total annual participation of 268,000,671 activity occasions in 1967 with the highest participation by far during the summer months, June through August.

Two categories which stand out in the very low percentage range on the Needs charts are camping facilities and trails mileage. Other facilities in the low percentage category include development items such as tennis courts, picnic tables, exhibits, archery ranges, and amphitheaters.

Total activity occasions are expected to jump from over 280 million in 1970 to over 583 million by 1985. The most spectacular numerical increases will be in motor boating and watching outdoor games, but participation will more than double in other activities for which demand is relatively small, such as hiking, family camping, and organized youth camping. As facilities for most of these activities fail to satisfy current demand, special emphasis on them would be desirable. It should also be noted that participation will more than double in all water sports except fishing, which is already high.

Activities with the greatest anticipated increase in activity occasions between 1970 and 1985 are boating, outdoor games, sightseeing and driving, hunting, fishing, golf, swimming, vacation travel out-of-state, horseback riding, archery, and pleasure walking. Each of these areas is expected to increase over 10,000,000 activity occasions in the 15-year planning period, with facilities definitely needed for each.

In 1968, 227,980 Mississippians – over 15% of the population 16 years of age and older – bought hunting licenses. In the same year there were 233,355 resident licensed fishermen – 16% of the population 16 years of age and older. This represents an increase of 15.9% over 1959 for hunting and 16.8% for fishing.

Most Mississippians and out-of-state tourists use water as a focal point for outdoor recreation. Of the top five summer outdoor recreational activities, four are water-based, and in annual participation three of the top five are water-oriented. Swimming and fishing are popular outdoor recreational activities in Mississippi. Popularity of water sports is increasing substantially and is expected to increase even more rapidly with construction of new reservoirs within the State.

Because of the popularity of water-based activities, a high priority should be afforded the development of various facilities on or near water. Fishing, swimming, and boating are among the most popular outdoor recreational activities in Mississippi and will continue to remain high in popularity. Camping and picnicking activities are high in priority and are more desirable near water. Adequate shoreline around reservoirs and lakes should be acquired for land-based water-related activities. Scenic and recreational use easements should be acquired either by title or less than fee title along the shorelines of existing water bodies. Shorelines should be zoned for maximum recreational benefits to maintain quality and prohibit incompatible uses.

Most of the streams in Mississippi are relatively flat and slow-flowing; therefore, every law enforcing and engineering tool should be used to halt the pollution of these streams and the numerous lakes scattered throughout the State. Rigid controls must be enacted by the Mississippi Air and Water Pollution Control Administration containing strong punitive measures for violators. These controls must also be enforced by municipal, county, regional, and State and Federal agencies.

Problems relating to outdoor recreation in Mississippi range from a general misunderstanding of the inherent economic and social values to the means for correcting specific deficiencies. Mississippi has two major problems that prevent or severely hinder correction of other problems. First, there is a lack of coordination among the state agencies that deal with recreation, and second, there is a lack of money for recreation development.

Mississippi State Government has seven agencies that are concerned with recreational development having statewide jurisdiction and five State agencies that have regional jurisdiction. There is a general lack of coordination among these agencies and even more so among these agencies and other political subdivisions of the State. Several of the major State agencies charged with the responsibility of maintaining and operating areas for outdoor recreation are inadequately funded; particularly, the Mississippi Park System, the Game and Fish Commission, and the Department of Archives and History.

Many of the State's historical sites and scenic areas are being destroyed by natural elements, vandalism, or individual thoughtlessness simply because agencies concerned with preservation of historic sites and scenic areas do not have the funds and/or authority to develop, preserve, and protect these sites. A concentrated effort should be made to maintain and protect the State historical and natural areas and sites before they are destroyed or rendered unattractive.

There is a good framework of existing legislation in Mississippi on which recreation programs can be built. Unfortunately the State and its many political subdivisions have not taken advantage of existing legislation giving them power to acquire and develop recreation areas and facilities and to establish the means of financing. There are, however, a number of discrepancies in the existing legislation.

### *Summary of Five-Year Action Program*

In the Five-Year Action Program, published in a separate volume, acquisition and development schedules in Mississippi for the next five years were developed. These schedules reflect proposed acquisition and development projects in each of the 12 planning districts of the State by (1) all Federal agencies having outdoor recreational responsibilities in Mississippi; (2) State agencies; (3) counties; (4) cities; and (5) private organizations for the fiscal years 1970–74. This schedule reflects a maximum attempt to equitably provide future outdoor recreational opportunities throughout the 12 planning districts for all Mississippians, at the same time recognizing the accelerated needs concentrated in the urban centers of the State.

During the past five years, 1965–1969, approximately $28 million was expended in Mississippi for acquisition and development of outdoor recreation lands and facilities. Approximately 85% of this expenditure was allocated to development, the remainder to land acquisition.

Approximately $72 million is scheduled for outdoor recreation development in the State of Mississippi over the next five years, of which $66 million represents scheduled expenditures for development and $6 million for land acquisition. Twenty-one percent of the program's costs are proposed to be financed by general appropriation and bonds of the State and its political subdivisions, 10% by private groups and the remaining 69% by various Federal agencies, through Federal loan and grant-in-aid programs.

Priorities for planned projects were established and quantitative criteria developed for application to all projects submitted for assistance under the Land and Water Conservation Fund Act of 1965 for priority for funding based on relative needs for outdoor recreation opportunities in various areas of the State. In addition, all projects are rated according to the type of project and assigned a rating as to index of need. For purposes of clarity and project review, schedules of acquisition and development are presented for each of the State's 12 planning districts.

Generally, large scale, high cost projects at the State, county, and local levels have been time-phased over an appropriate number of years to better utilize federal funding assistance, maximize the impact of Land and Water Conservation Funds on recreation development throughout the State in each fiscal year, and produce a logical order of project developments geared to significant satisfaction of comparative district outdoor recreation deficiencies.

Adequate financing will be the key to successful implementation of Mississippi's five-year action program in outdoor recreation development. All potential financial resources, especially federal grant-in-aid programs, must be fully utilized if the program is to become a reality. Successful implementation of this five-year action program will, of course, be dependent upon several variables such as national economic and political conditions, Congressional approval of Federal projects, Federal and State appropriations, ability of the State's political subdivisions to finance projects, and continued public and government interest in outdoor recreation development. Use of Land and Water Conservation Fund allocations at the State level to most effectively support the five-year action program will be accomplished through the allotment of two-thirds of such funds to projects planned by State agencies and one-third to projects planned by the State's political subdivisions.

# INTRODUCTION

This publication is an updated version of the *Outdoor Recreation Plan: Resources and Opportunities in Mississippi,* prepared for the Mississippi Park System by the Community Development and Planning Division of the Mississippi Research and Development Center in October, 1966, and is the official comprehensive outdoor recreation plan for the State of Mississippi. The Plan is a requirement for State participation in the Land and Water Conservation Fund Act of 1965.

The objectives of this Plan are to:

1. Guide recreational development in Mississippi in an orderly fashion on a statewide level
2. Survey public, semipublic, commercial and private outdoor recreational opportunities in Mississippi
3. Determine recreational needs of the State for meeting present and future demand
4. Develop minimum standards for recreational development
5. Develop a five-year action program for acquisition and development of lands and waters needed to satisfy present and future recreation needs of Mississippians.

The *Mississippi Comprehensive Outdoor Recreation Plan* gives detailed planning information for one phase of the comprehensive state economic development plan currently being completed for Mississippi. The State of Mississippi, as a government body, is responsible for the welfare of her people, and recreational opportunities are becoming increasingly more important for general well-being and economic advancement. This Plan should not be construed as absolute and final; planning in the field of outdoor recreation, as in other fields of planning, is a continuing process with revisions and modifications periodically necessary. Maintenance of the Plan is discussed on page 201.

### *Legal Authority and Signatures*

Chapter 240, Laws of 1964, State of Mississippi, grants broad powers to the Mississippi Park System in developing outdoor recreational facilities and in cooperating with all other interested agencies to provide recreational opportunities. Governor Paul B. Johnson, Jr., of Mississippi, by Executive Order Number Two, February 26, 1965, designated the Board of Directors of the State Park System to be the authorized representative of Mississippi to act for the State under the provisions of the Land and Water Conservation Fund Act of 1965. The Board has the authority to plan and coordinate activities of all agencies and departments of State, county, municipal, and other governmental units in Mississippi's dealings with outdoor recreation facilities in the State.

Executive Order Number Two is as follows:

# EXECUTIVE ORDER NO. 2

By virtue of the authority vested in me as Governor of the State of Mississippi, pursuant to the Constitution and applicable statutes of the State of Mississippi, it is ordered as follows:

SECTION 1. The State of Mississippi and its political subdivisions should preserve and develop such quality and quantity of outdoor recreation resources as may be available and necessary and desirable for individual active participation in such recreation. It is the purpose of this executive order to provide authority to enable the State of Mississippi and its political subdivisions to participate in the benefits of the "Land and Water Conservation Fund Act of 1965," for the planning and development of outdoor recreation resources, including the acquisition of needed land and water areas and facilities and interest therein.

SECTION 2. The Board of Directors of the State Park System is hereby appointed and designated the authorized representative of the State of Mississippi with authority to represent and act for the State under the provisions of the Land and Water Conservation Fund Act of 1965 (hereinafter called "Act"). Said authorized representative is authorized to supervise the preparation and to supervise the work necessary to maintain and keep up-to-date a comprehensive statewide outdoor recreation plan for the development of outdoor recreational resources of the State (hereinafter called "Plan"). The State Park System (hereinafter called "System") is authorized by the provisions of Senate Bill 1966, Laws of 1964, to develop, operate, and maintain outdoor recreation areas and facilities of the State, and to acquire land, waters, and interest in land and waters for such areas and facilities as provided for by the aforesaid applicable law. Additionally, applicable provisions of Mississippi law authorize the Mississippi Game and Fish Commission, State Highway Department, Forestry Commission, and other agencies and departments of the State of Mississippi to acquire land and waters and interest in land and waters for proper constitutional and statutory purposes, including outdoor recreation facilities. Accordingly, the System may enter into contracts and agreements with the United States or any appropriate agency thereof, keep financial records relating thereto and furnish appropriate officials and agencies of the United States Government and agencies thereof to perform their duties under such Federal programs. In connection with obtaining for the State of Mississippi the benefits of any such program, the System shall submit a comprehensive State Plan to the Secretary of the Interior and shall coordinate its activities with and represent the interest of all agencies and departments of the State and of the county, municipal and other government units and subdivisions of the State of Mississippi having interest in the planning, development and maintenance of outdoor recreation resources and facilities within the State.

SECTION 3. The System is fully empowered, subject to my specific approval on each project, to accept and to administer Federal funds paid under said Act for approved projects, and such powers and functions are hereby fully recognized, ratified, approved, and confirmed under the intention of this executive order. Before each project may be undertaken, determination must be made that sufficient funds or services in kind are available to it for meeting the State's share of project costs. It is the intent of this executive order that, to such extent as may be necessary to assure the proper operation and maintenance of areas and facilities acquired or developed pursuant to any program participated in by this State under the authority of this Act by any of its agencies or departments. such areas and facilities shall be publicly maintained for outdoor recreation purposes. The System may enter into and administer agreements with the United States or any appropriate agency thereof for the planning, acquiring, or developing of projects involving participating Federal assistance funds on behalf of any county, municipality or other governmental unit which gives necessary assurances to the System that it has available sufficient funds or services in kind to meet its share of the cost of this project and that the acquired or developed areas will be operated and maintained at its expense for public outdoor recreation use.

IN FAITH WHEREOF, I have affixed my official signature and thereby authorized that this Executive Order be issued and become effective on this the 26th day of February, A.D., 1965.

GOVERNOR

*Planning Participation and Methods*

Participation in the Planning Process. This Plan was prepared under contract with the Mississippi State Park System by the Community Development and Planning Division of the Mississippi Research and Development Center. Planning money from the Land and Water Conservation Fund was furnished by the Bureau of Outdoor Recreation to finance half of the study expense. The other half of the cost was split between the Mississippi Park System and the Mississippi Research and Development Center.

In addition to the help received from the administrative staff of the Park System, major assistance was provided by the Mississippi Cooperative Extension Service through county agents in obtaining information on the supply inventory from each county.

Other agencies contributing information and participating in the preparation of this Plan include: Bureau of Indian Affairs, Bureau of Public Roads, Bureau of Outdoor Recreation (U. S. Department of the Interior), County Boards of Supervisors, Farmers Home Administration (U. S. Department of Agriculture), Mississippi Agricultural and Industrial Board, Mississippi Air and Water Pollution Control Commission, Mississippi Board of Water Commissioners, Mississippi Boat and Water Safety Commission, Mississippi Cooperative Extension Service, Mississippi Department of Archives and History, Mississippi Forestry Commission, Mississippi Game and Fish Commission, Mississippi Gulf Coast Regional Planning Commission, Mississippi State Highway Department, Mississippi Park System, Mississippi State Board of Health, Mississippi State Department of Education, Municipal Officials, National Park Service (U. S. Department of the Interior), North Delta Economic Development District, Pat Harrison Waterway District, Pearl River Valley Water Development District, Pearl River Valley Water Supply District, Soil Conservation Service (U. S. Department of Agriculture), South Delta Economic Development District, South Mississippi Economic Development District, Southwest Mississippi Economic Development District, Tennessee–Tombigbee Waterway, Tennessee Valley Authority, Tombigbee River Valley Water Management District, U. S. Corps of Engineers, Mobile, New Orleans and Vicksburg Districts (Department of the Army), U. S. Fish and Wildlife Service (Department of the Interior), U. S. Forest Service (Department of Agriculture) and the Yellow Creek Watershed Authority.

Planning Methods. New recreation planning districts were adopted for this Plan utilizing the economic development planning districts delineated for State planning purposes. The criteria used to delineate the districts were: county integrity and contiguity, limitation by state boundaries, homogeneity of socioeconomic characteristics, common interest in strategic transportation resources, avoidance of major natural barriers, consideration of existing regional boundaries, homogeneity of sociopolitical characteristics, inclusion of at least one "growth center," conformance to commuting patterns, and conformance to major trade areas. The three "Appalachian" districts (2, 4, and 7) cover 17 of the 20 counties under the Appalachian Regional Commission Authority in Mississippi. Kemper, Marshall, and Benton are also designated Appalachian counties. An exception and deviation was made from the state planning districts for the recreation planning districts by combining all of Economic Development Planning Districts 1 and 2, along with parts of Districts 4, 5, and 7, into Recreation

Planning District 1, Great Lakes. This adaptation was made to prevent splitting the four large reservoirs in the northern part of the State into more than one district. All data collected have been kept on a county basis so that they may be combined into alternate district delineation at any time this becomes advisable (see Map 1).

A major attempt was made to get an exact inventory of existing land, wetland and water areas, along with developed facilities, which are being utilized for outdoor recreation activities in the State of Mississippi. An attempt also was made to develop an inventory of all programmed and potential areas and facilities that will enlarge the supply of outdoor recreation opportunities.

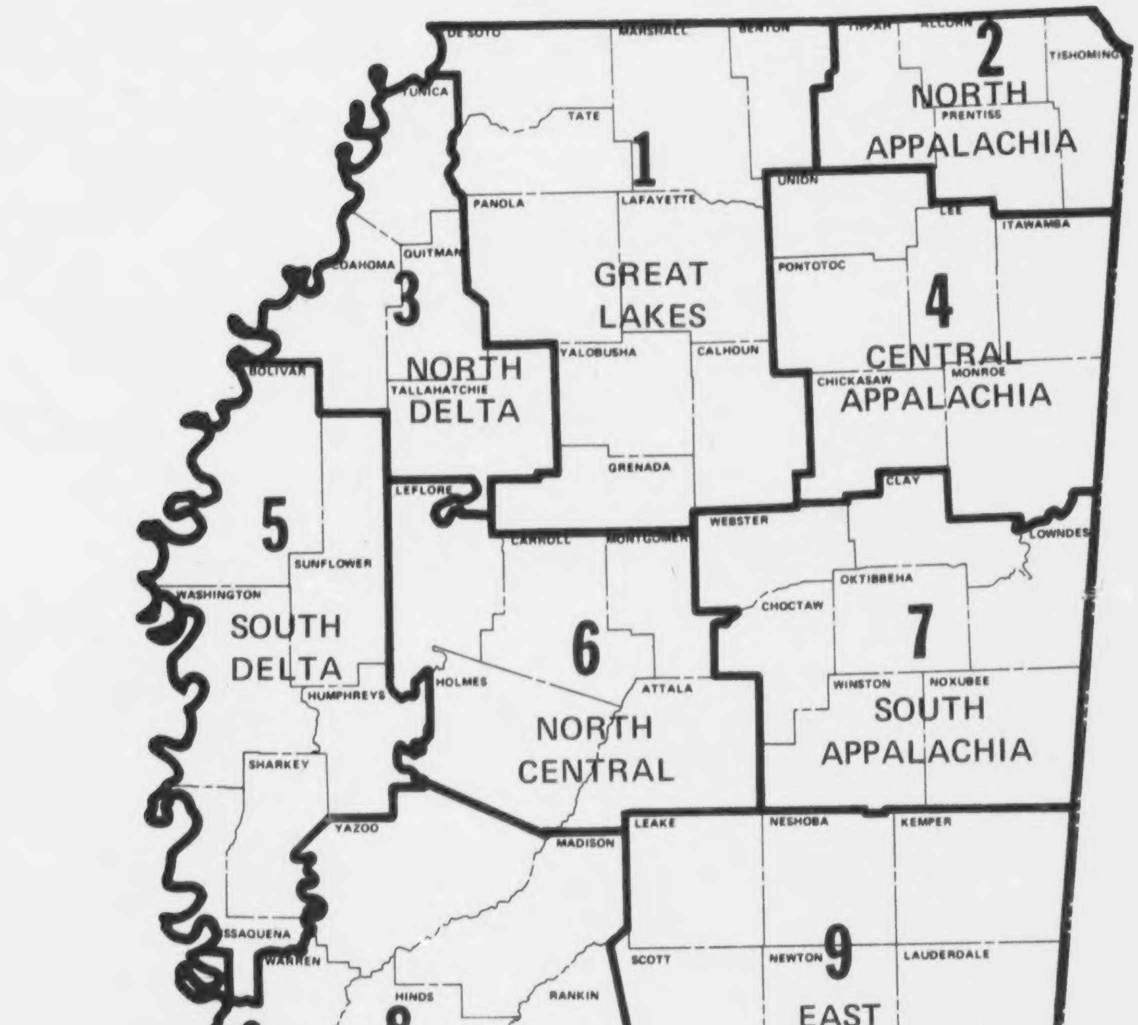
Groundwork for the supply inventory was started in May, 1967, with the drafting of three inventory forms: one for existing areas and facilities, one for programmed areas and facilities to be developed by 1975, and a third for potential areas which at this time have no development plans. A draft copy of each form was distributed to the Mississippi State Park System, Mississippi Game and Fish Commission, U. S. Army Corps of Engineers, U. S. Forest Service, and the U. S. Soil Conservation Service – the major suppliers of outdoor recreation opportunities in Mississippi – for their review and comment. Each agency's criticisms and suggestions were considered, and many were incorporated into new drafts of the forms, These new drafts were then returned to the same agencies for pilot surveys on areas of their choice. The responses from the pilot surveys were satisfactory, and the inventory forms were printed in final form.

Each State and Federal agency which owns or operates areas and facilities contributing to the supply of outdoor recreation opportunities in Mississippi was contacted and requested to complete forms on each area – existing, programmed, or potential – falling under its jurisdiction. Also, each functioning city recreation department or commission in the State was contacted and requested to complete applicable inventory forms.

In order to secure an inventory of those areas not under the jurisdiction of a State or Federal agency, and of those areas not reported directly by one of the cities, it was necessary to turn to another source of information. It was determined that the most logical person to conduct the field inventory in each county was the county agricultural agent, since generally this individual would know more about his county than anyone else and he could call upon others to assist him in gathering the required information. A proposal was submitted to the Mississippi Cooperative Extension Service soliciting its help in the statewide survey, and the Extension Service pledged the assistance of all 82 county agents to conduct the county-by-county survey.

A meeting was held at the Mississippi Research and Development Center with the Associate Director and the four district agents of the Cooperative Extension Service to work out the mechanics of conducting the survey. Later, a meeting was held in each of the Extension Services's four districts, with all the county agents in attendance, to explain the purpose of the survey and the mechanics of filling out the forms. At these meetings, a date and time was set at the convenience of each of the 82 county agents for a visit from a member of the planning team to assist in any way possible in conducting the survey in his county.

Map 1
MISSISSIPPI OUTDOOR RECREATION PLANNING DISTRICTS



Mississippi Research and Development Center

In order to determine indicators of demand, the planning agency conducted a statewide survey entitled "Mississippi Recreation Survey (1967)" during the fall of 1967 and winter of 1968. The first phase involved a survey of the general population; the second phase surveyed recreational participants at 13 of Mississippi's State Parks.

In the first phase, the sample surveyed was drawn from the driver's license records of the Mississippi Highway Safety Patrol, primarily because these are the only name and address records available that include individuals of all races, income levels and both sexes, and that have an age range of 15 and up. A sample of 2,000 persons was drawn by computer process so that age and race characteristics of the sample would approximate those of Mississippi's population.

The same form was distributed at random to visitors at 13 of Mississippi's State Parks. Of 1,883 forms distributed, 196 were returned from five parks, providing a return rate of 10.4%. Because of this low rate and an overall return from less than half the parks, the State Park visitor survey is inadequate for statewide planning purposes and survey results were not considered in this study.

Areas and facilities required to provide sufficient opportunity for quality participation were calculated from the application of development standards as they pertained to desirable area and facility capacities and to quantity of areas and facilities needed per specified population unit (usually per 1,000 people). These standards were developed from the evaluation and comparison of recognized standards from around the country with participation patterns and economic conditions of the Mississippi population.

Projections of area and facility requirements for 1970, 1975, 1980 and 1985 were made. These projections consider both population increases and sociological-economic-cultural trends as reflected in participation increases. These requirements less the 1968 supply indicate the needs for each of the projection periods.

To get detailed information of programmed areas in the State for developing a five-year acquisition and development program, a series of six meetings was held throughout the State – one for State agencies, one for Federal agencies, and four for local officials. The four meetings for local officials were held in four geographic sections of the State to gather and assimilate data on local recreational projects planned. The local officials receiving letters of notification were presidents of the boards of supervisors of each county and the mayors of all towns of 1,000 or more population. A public notice was sent to news media, including 192 newspapers, inviting any interested citizens to participate in these meetings. This news release was also sent to newspapers in major urban areas outside of the State.

The letters which were sent to agency and local officials regarding these meetings included a submittal form which was to be completed and returned to the planning agency at the respective meeting. It was necessary to receive the following information so that each agency's outdoor recreation development program could be included in this Plan and made eligible for participation in the Land and Water Conservation Fund Program:

1. Summary of expenditures for acquisition and development during the past five years in terms of amount, type of investment, facilities provided, location and year.
2. Plans for outdoor recreation acquisition and development during the next five years including magnitude, cost and priority of these programmed actions. Specifically, the schedule was to include:
    a. type and size of facility or resource to be acquired or developed
    b. fiscal year programmed
    c. number of units, facilities and activities to be developed
    d. anticipated cost, totaled and itemized as much as possible
    e. source of funding
    f. relative priority of each project.
3. Statement of policy for outdoor recreation, and recommendations pertaining to legislation or policy needs and/or changes to influence the provision of outdoor recreation and the quality of the outdoor environment.
4. Any problem faced by the agency in outdoor recreation development.

Information received through these meetings is included in various sections of this Plan, primarily the five-year action program.

Upon completion of the preliminary draft, copies of the Plan were assembled and mailed to various State and Federal agencies that are concerned with recreational development in Mississippi for their review and comments. Each reviewing agency was requested to read the report and return it to the planning agency with comments and suggestions.

As a result of the interagency review process and comments received from the Bureau of Outdoor Recreation, each agency's criticism and suggestions were considered and some were incorporated into a refined draft for printing. Agencies which received copies of the Plan for review and comment are listed below.

1. Bureau of Outdoor Recreation, Southeastern Regional Office
2. Federal Water Pollution Control Administration
3. Mississippi Air and Water Pollution Control Commission
4. Mississippi Federal Programs Coordinator (Governor's Office)
5. Mississippi Game and Fish Commission
6. Mississippi Gulf Coast Regional Planning Commission
7. Mississippi Public Health Department
8. Mississippi Research and Development Center
9. Mississippi State Highway Department
10. Mississippi State Park System
11. Mississippi Water Safety Commission
12. National Forest Service in Mississippi
13. National Park Service, Liaison Officer to Mississippi
14. Pat Harrison Waterway District
15. Pearl River Valley Water Development District

16. Tombigbee River Valley Water Management District
17. U. S. Army Corps of Engineers (Mobile and Vicksburg Districts)
18. U. S. Fish and Wildlife Service, Southeastern Regional Office
19. U. S. Soil Conservation Service in Mississippi

# CHAPTER 1

# GENERAL PROFILE OF MISSISSIPPI

## HISTORY

Mississippi's rich historical background, particularly that of the romanticized antebellum era, has become well known beyond the State's boundaries. It is a source of pride for Mississippians and an important source of income for those businesses which cater to tourists visiting the State. Mississippi's recorded history dates back over 300 years before the building of great plantation homes and fortunes to the time when the Spanish, French and British competed for control of the rich Lower Mississippi Valley and left their marks on its culture and economy. Three major Indian tribes – Choctaws, Chickasaws and Natchez – occupied the area that is now Mississippi. Winterville Mounds and Nanih Waiya Mounds are two recreational areas built around Indian remains.

In the late 1700's when the white man began migrating to Mississippi, his only motive for settlement was economic gain. Settlements centered around the fertile Natchez area. The Mississippi area attained territorial status in 1798 and statehood in 1817. The State was prosperous, and in the period shortly before the Civil War, Mississippi was well on its way to a balanced economy with capital gain from agriculture being invested in industry.

The years of the Civil War exacted their toll from the manpower, wealth, productivity and development of the State. After the austere reconstruction period which followed this war, Mississippi was readmitted to the Union in 1870; however, it was not until the end of the reconstruction government in 1876 that the State began its slow recovery. Several historical park lands are located at Civil War sites, such as Vicksburg National Military Park, Tupelo National Battlefield, Grand Gulf State Military Park, and Brice's Crossroads National Battlefield Site.

The Natchez Trace Parkway, running diagonally across the State from southwest to northeast for 318 miles (242 miles completed), is actually one vast park with historical sites pertaining to prehistoric and historic Indians and early exploration marked along the route. (See p. 37 in the Supply Section for a listing of archeological and historical sites in Mississippi).

# DEMOGRAPHY

The first United States Census of Mississippi, taken in 1800, showed a population of 7,600. Ten years later the population had increased over 300%, and by 1860 there were nearly 800,000 persons residing in the State. The rate of growth slowed markedly during and shortly after the Civil War years; however, in the late 1870's the rate increased, and growth continued at a relatively steady pace until 1940 when the population reached 2,183,796. The State lost residents during the next two decades, and by 1960, the U. S. Census showed a population of 2,178,141.[1] Mississippi started gaining population again in the late 1950's, and by 1967 the estimated population was 2,362,980.[2]

[1] U. S. Bureau of the Census, *Census of Population 1960*, "Number of Inhabitants."

[2] Ellen S. Bryant and Jerry W. Fly, *1967 Mississippi County Population Estimates by Race and Age*, Sociology and Rural Life Series No. 20 (State College, Mississippi: Agricultural Experiment Station, Mississippi State University, February, 1969), p. 1.

## CLIMATE AND GEOGRAPHY

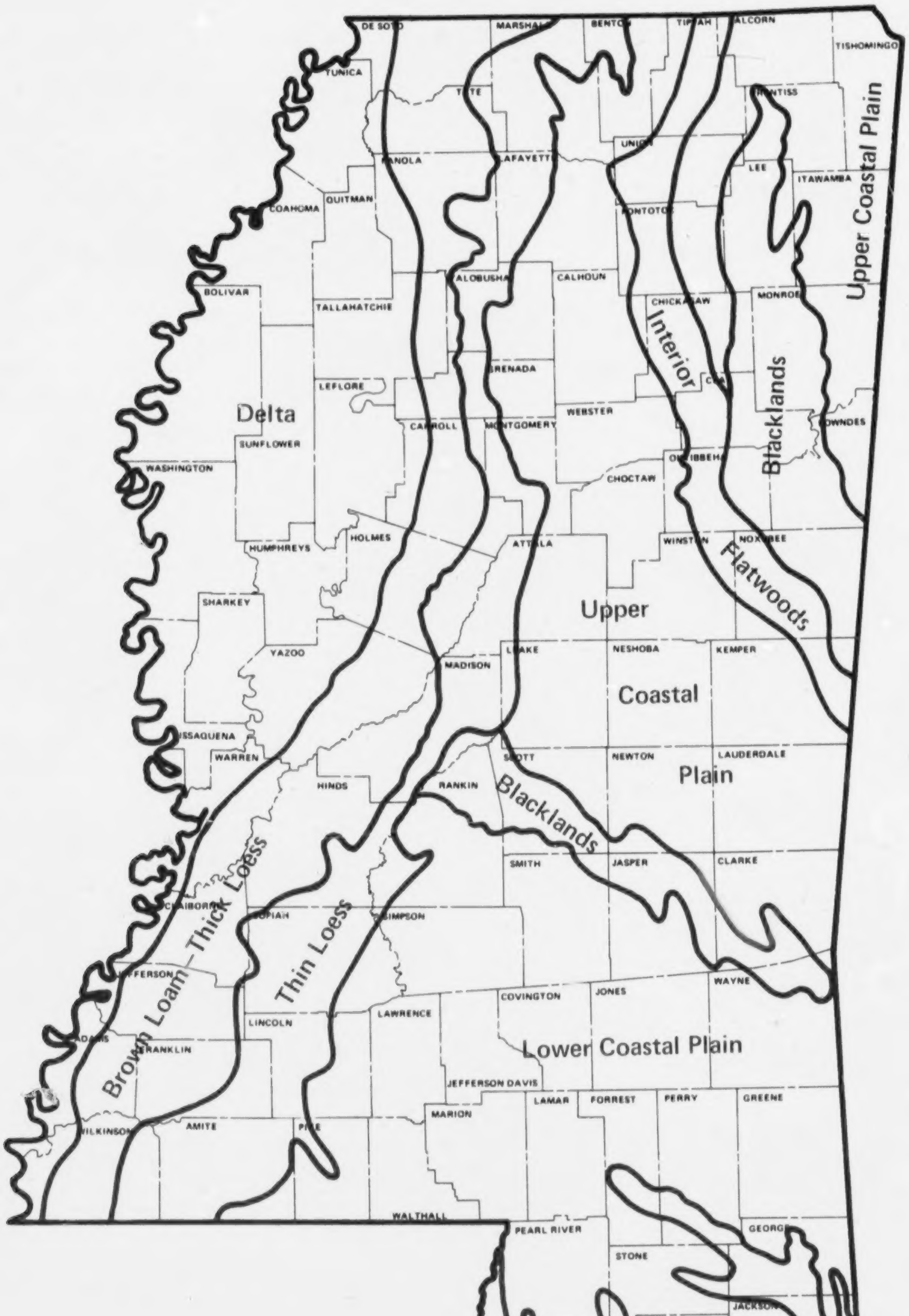
One of Mississippi's greatest assets is a generally warm and pleasant climate. It is classified as "sub-tropical," with a mean July temperature of 82° and a mean January temperature of 48°. Mean July temperatures vary little across the State, but mean January temperatures range from 53° on the Gulf Coast down to 43° across the northernmost part of Mississippi.

Average annual precipitation is 53", with most precipitation occurring during the winter months. The quantity of rain and proximity to the Gulf of Mexico result in generally high humidities throughout the State. The relatively low altitude and latitude of Mississippi bring high temperatures and, consequently, rapid evaporation, which partially compensate in summer months for the high humidity. Heavy snowfalls are experienced occasionally in the northern and northwestern areas, but snowfalls in the rest of the State are rare and seldom of consequence.

Mississippi lies entirely within the Gulf Coastal Plain Province, but its topography is far from monotonous as the term "plain" would imply. There are eight distinct land resource areas as shown on Map 2.

Mississippi covers 47,716 square miles, with an extreme width of 180 miles and an extreme length of 330 miles. The coastline, including the irregularities and the islands, is 202 miles long, but the distance between its extremities is less than 100 miles.

## Map 2
## LAND RESOURCE AREAS IN MISSISSIPPI



SOURCE: Mississippi State University, Agricultural Experiment Station.

## NATURAL RESOURCES

Mississippi has many natural resources for the development of opportunities in outdoor recreation. Much of the land is in its natural state, free from human encroachment. This is credited mainly to the nature of the land and the relatively low population density of the State.

Mississippi was the first state east of the Mississippi River to establish a water resources board and systematically to develop and study water conservation practices that would assure unlimited water for municipal, industrial, agricultural and recreational uses.

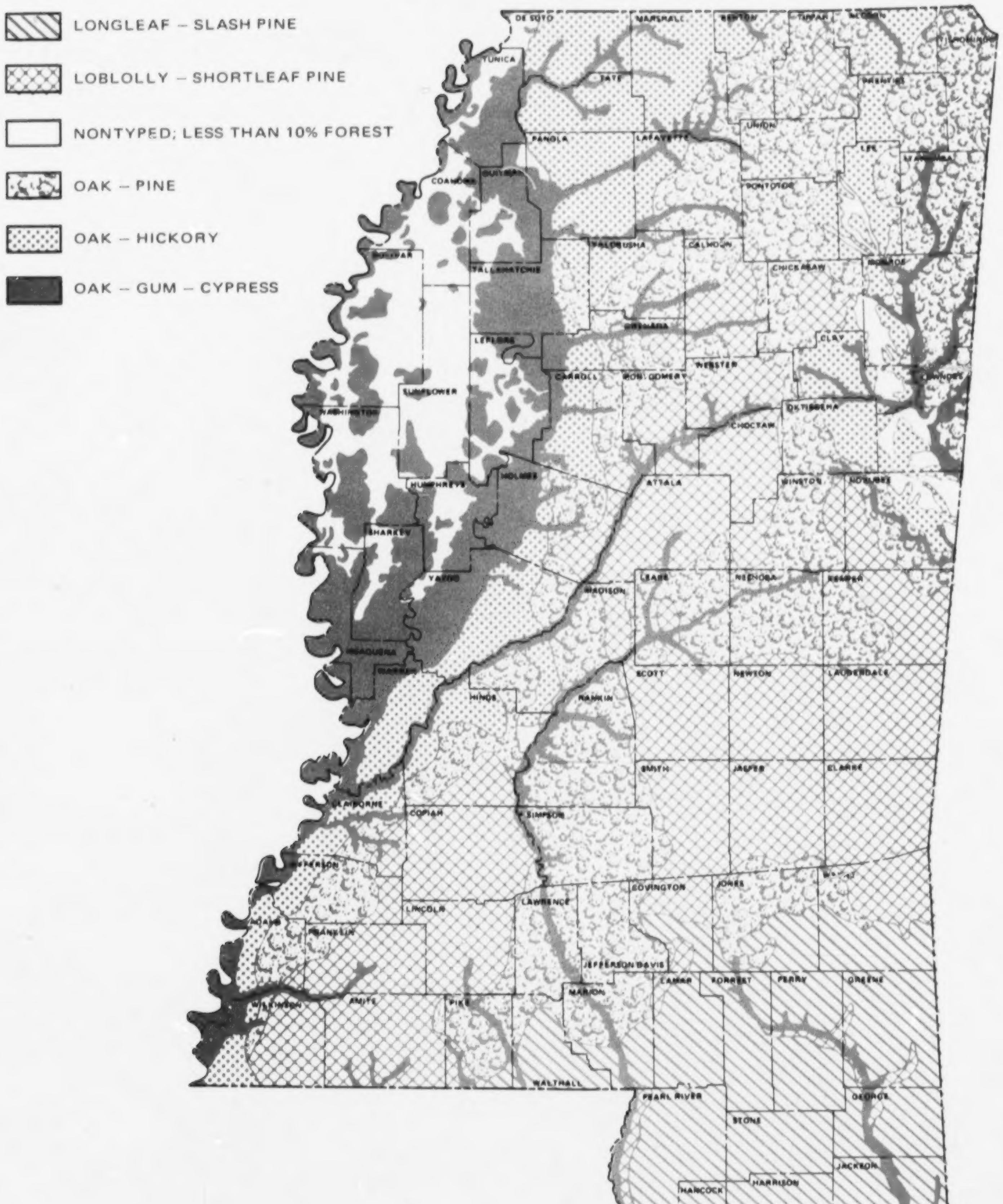
### CAPSULE FACTS ON MISSISSIPPI'S WATER RESOURCES

1. Six major reservoirs (ranging in size from 3,800 to 30,000 acres) are located in the State, along with thousands of lakes and ponds; in addition, some 306 small watersheds have been designated (ranging from 20,000 to 240,000 acres) to assure sound conservation practices.
2. Inland water area amounts to 493 square miles.
3. The Mississippi River, which borders the State on the west, has a daily average flow of 300 to 500 billion gallons of water.
4. Eight rivers in the State have minimum flows in excess of 100 million gallons per day.
5. Artesian water can be found in most areas of the State at depths of 80 to 220 feet, and wells producing 1,000 gallons per minute are common.

The area occupied by commercial forest in Mississippi, about 57% of the total land area, is larger than the combined acreage devoted to all other land uses and represents the State's most valuable resource. The forest area is increasing at the rate of 24,000 acres per year.

Mississippi abounds with a variety of wildlife. Excellent hunting exists in season for deer, quail, dove, duck, turkey, goose, fox, rabbit, squirrel, opossum and raccoon. Fishing, fresh and saltwater, is in season throughout the year and provides a major tourist attraction. Many inland streams, lakes and reservoirs are well stocked with game fish.

## Map 3
## FOREST TYPES IN MISSISSIPPI



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SOURCE: U. S. Department of Agriculture, Southern Forest Experiment Station.

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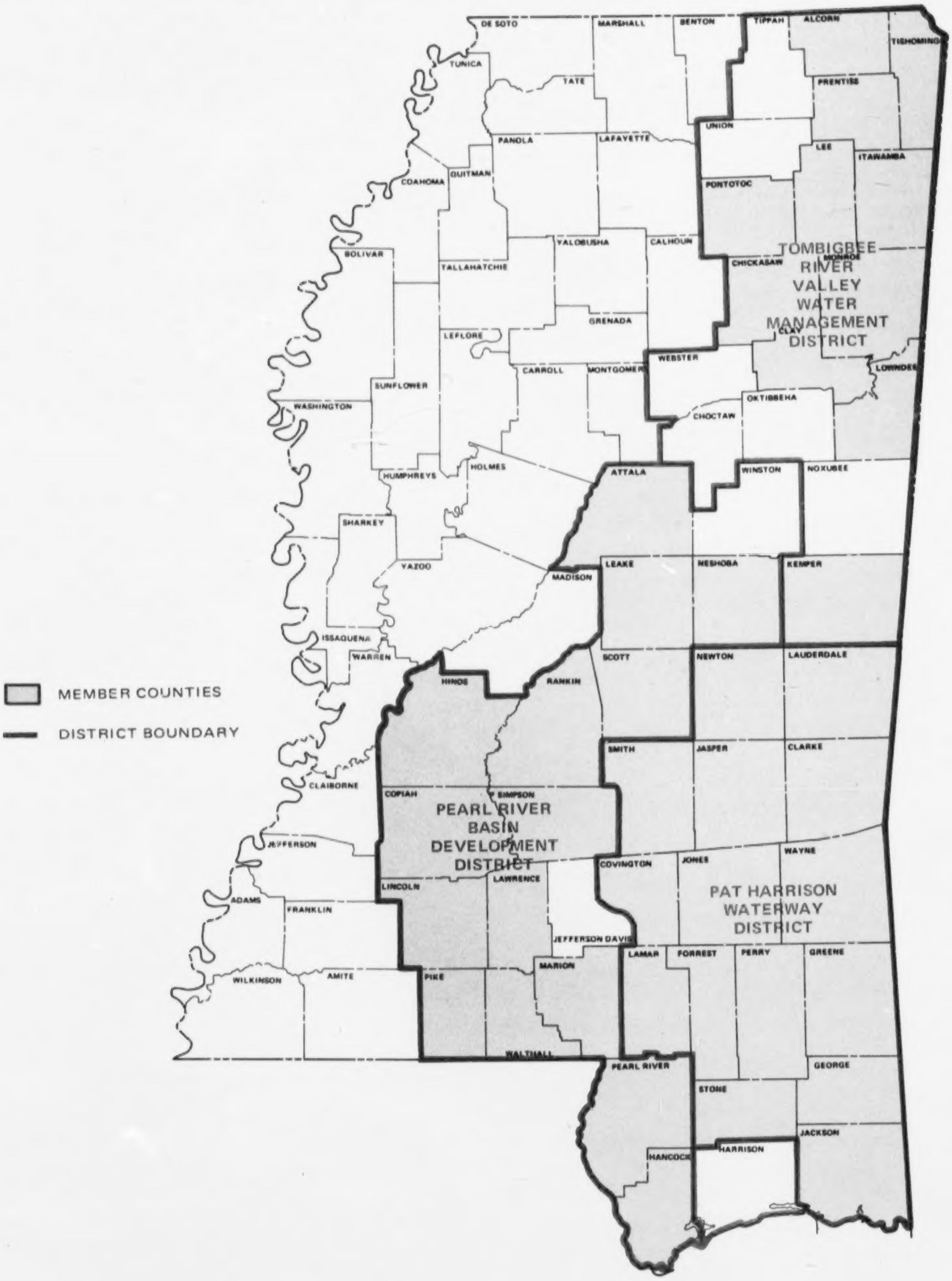
## Map 4
## MISSISSIPPI WATER DEVELOPMENT DISTRICTS



SOURCE: Mississippi Rivers and Harbors Association.

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Mississippi Research and Development Center

# TRANSPORTATION

Mississippi has air, land, and water transportation available for commercial goods and services as well as for personal use. Port facilities along the Mississippi River and the Gulf Coast link the State with the oceangoing transportation of the world. The State is served with airline and rail transportation, and nearly 9,000 miles of paved roads traverse all sections of Mississippi. Three interstate highways will provide 676 miles of uninterrupted driving when completed. Highway facilities, especially with regard to location, are important considerations in recreation planning. Map 6 shows the location of interstate and U. S. highways, and Map 7 shows the highway traffic volume in 1968.

A profile of Mississippi's economy and population is given in Chapter 3 under Demand Indicators.

## CHAPTER 2

## SUPPLY OF OUTDOOR RECREATION RESOURCES

# INTRODUCTION

As Mississippi is still largely a rural state, it has an abundance of land, water and forest resources that provide opportunities for outdoor recreation. Many of these, however, have not been developed to serve the needs of recreationists.

In order to determine exactly what land, wetland and water areas are being utilized for outdoor recreation activities, what areas are programmed for development, and what areas offer potential for development, an inventory was made during 1968.[1] All Federal, State and city agencies which own or operate areas and facilities for outdoor recreation use were contacted and requested to complete forms on existing, programmed and potential areas which fall under their jurisdiction. In addition, the Mississippi Cooperative Extension Service helped gather information on areas which do not fall under the jurisdiction of any of these agencies.

The inventory data contains some inconsistencies and errors, primarily because many different persons with varying knowledge of outdoor recreation furnished the data and because the inventory had to be completed in such a short time. The inventory of State and Federal areas is presumably accurate, though size and facility counts will be revised with the construction of programmed areas. The inventory of semipublic, commercial, private and other public areas is less accurate because, when exact information was not available, a judgment was made on size and number of facilities. Also, some areas may simply have been overlooked.

The purpose of this chapter then is to (1) identify the governmental agencies and private organizations which administer significant recreation resources, (2) indicate how these resources are distributed over the State, and (3) determine areas with potential for development.

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[1] See Appendix to the *Mississippi Statewide Outdoor Recreation Plan*, Appendices 1–A, 1–B, and 1–C.

## AGENCIES THAT SUPPLY RECREATION RESOURCES

### *Federal*

There are five principal agencies which control the supply of Federal recreation areas in Mississippi – the U. S. Army Corps of Engineers, U. S. Forest Service, U. S. Fish and Wildlife Service, National Park Service and Soil Conservation Service.

The Corps of Engineers operates and maintains four major reservoirs on which are located the largest concentration of outdoor recreation areas and facilities in the State. These reservoirs cover 261,945 acres and have 425 miles of shoreline at normal recreation pool level. Of the total 261,945 acres, 81,940 are in water acres. Under construction now are the Pearl River recreational boatway, a project which consists mainly of channel improvement, desnagging and dredging, and a fifth reservoir, which will have 10,950 acres, 3,800 of which will be water. It is scheduled to be placed in service during the summer of 1969. The Corps will not operate facilities on this new reservoir but provided the shoreline, on which Pat Harrison Waterway District is developing recreational facilities. This procedure will be followed for other reservoirs in the future.

Since freshwater fishing is by far the most popular outdoor activity among Mississippians, and since participation in all water sports, especially motorboating, is expected to increase rapidly, the Corps reservoirs provide a major source of supply for participation in outdoor recreation. The four existing reservoirs are all located in the northern portion of the State along Interstate 55; the fifth will be located in central Mississippi, northwest of Meridian. While TVA's Pickwick Lake serves the northeast section of the State and state-operated Ross Barnett Reservoir serves the central area, there are no large man-made water bodies in the Delta or in the southern portion of Mississippi.

The largest public landowner in Mississippi is the National Forest Service. It operates six national forests containing a total of 1,134,001 acres of land. This acreage is designated for multipurpose use, with recreation as one of the uses, and is well distributed geographically across the State. Within this acreage there are 25 developed national forest recreation areas available for public use. In addition to developed areas for camping and picnicking, the Forest Service provides and maintains the only scenic float stream, Black Creek, and the only true hiking trail, Tuxachanie Trail, in Mississippi.

The Forest Service has two additional major recreation areas programmed for development. Each of the new areas will be centered around a lake in excess of 200 acres, and each development will contain approximately 440 total acres, with full facilities for picnicking, camping, and nature interpretation. Additional development includes dispersed typed facilities primarily in the nature of horseback riding trails, hiking, nature, and bicycle riding trails. These forests with developed recreation areas are shown in Map 8 and Table 1.

As a major supplier of camping opportunities, the Forest Service performs a useful function for Mississippi residents and visitors. The demand for camping, especially family camping, is expected to more than double by 1985. As urbanization increases, so will other semiprimitive activities to which a national forest is especially conducive. The Forest Service, therefore, has the responsibility for continuing to study carefully urban consentrations in and near the State and traffic patterns on major access routes in order to place campgrounds where they are most needed. In addition, it is hoped that the Forest Service will continue to use its recreation resources innovatively, for there are many recreational developments for which large land areas are needed – the size area maintained in Mississippi only by the Forest Service.

The U. S. Fish and Wildlife Service operates and maintains three national wildlife refuges in Mississippi with 61,066 acres of land. These refuges are primarily for waterfowl with certain acreages restricted to prohibit hunting, but the Service has a working agreement with the Mississippi Game and Fish Commission that allows a large portion of the refuge acreage to be open for game hunting and for public fishing. Developed recreational facilities are limited in the refuges, but public use of the land is not discouraged. Some facilities are provided for picnicking and wilderness type camping.

The National Park Service maintains and operates two very significant areas in the State for historical interpretation and recreation. These are the Vicksburg National Military Park and the Natchez Trace Parkway. With approximately 1,800 acres, the Vicksburg National Military Park is one of the largest military parks in the National Park System. Its 16 miles of meandering parkway roads are dotted with memorials from each state which had troops fighting during the battle and siege of Vicksburg. Interpretive facilities include a museum and battlefield plates portraying the siege and battle of the river city. This park is primarily a historical park, with limited facilities for outdoor recreation other than historical interpretation, driving and sightseeing.

The Natchez Trace Parkway is a major resource for outdoor recreation in Mississippi. It is presently in the process of construction and development, but eventually will provide Mississippi with 318 miles of scenic roadway. The Mississippi portion of the Parkway is approximately 75% complete, with 242 miles open for travel and three sections containing 76 miles yet to be constructed. Angling from the Mississippi – Alabama state line in the extreme northeast, it ends at the city of Natchez in southwest Mississippi. Located all along the Trace are self-guiding interpretive markers, nature trails, wayside exhibits, overlooks, museums and interpretive centers. Also provided are numerous picnicking areas and two major park developments for overnight camping and picnicking.

Two smaller sites under the jurisdiction of the National Park Service in Mississippi are Brice's Crossroads National Battlefield Site and the Tupelo Battlefield Site, each consisting of one acre of land and a memorial monument commemorating the battle that took place at each site.

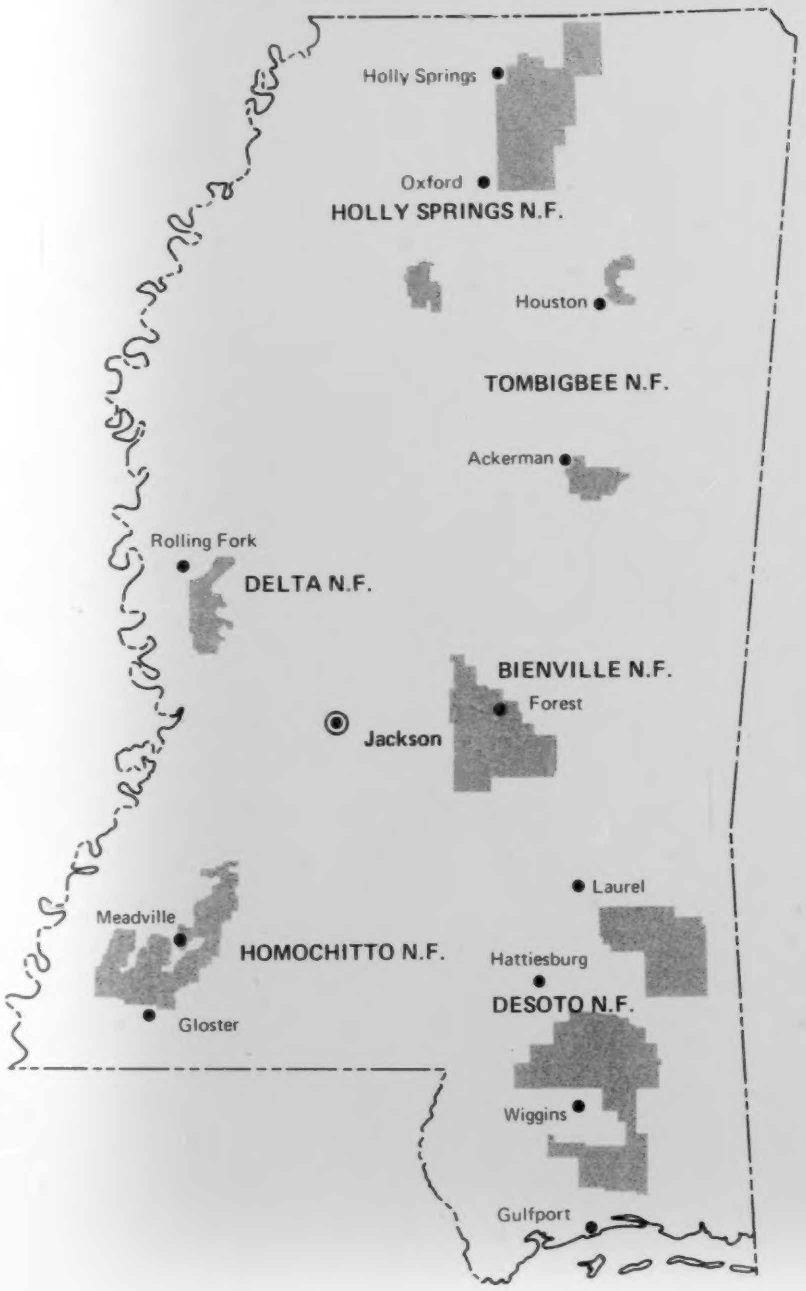
Mississippi has five sites that are not directly under the National Park Service but that are significant to the Department of the Interior. Four of these sites have been declared Registered National Historic Landmarks:

1. Fatherland Plantation Site – This site of the grand village of the Natchez Indians contains the remnants of three temple mounds, a plaza, and one mound that has been restored.
2. Lake George-Holly Bluff Site – This site contains 20 prehistoric temple mounds as well as an encircling wall and ditch which are rapidly deteriorating.
3. Old Warren County Courthouse – This antebellum courthouse is now being used as a museum.
4. William Faulkner's Home, Oxford.

## Table 1
## NATIONAL FORESTS IN MISSISSIPPI

| | Picnicking | Camping | Camp Trailer Parking | Sanitary Facilities | Drinking Water | Concessioner | Designated Charge Area | Swimming | Boating | Fishing | Shelter | Cabins | On Stream | On Lake |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BIENVILLE N.F.** | | | | | | | | | | | | | | |
| MARATHON | x | x | | x | x | | x | x | x | x | | | | x |
| RAWORTH | x | x | | x | x | | | | x | x | | | | x |
| SHONGELO | x | x | | x | x | | x | x | | x | | | | x |
| **DELTA N.F.** | | | | | | | | | | | | | | |
| BARGE LAKE | x | x | | x | x | | | | x | x | | | | x |
| **DESOTO N.F.** | | | | | | | | | | | | | | |
| AIREY LAKE | x | x | | x | x | | | | x | x | | | | x |
| ASHE LAKE | x | x | | x | x | | | x | x | x | x | | | x |
| BIG BILOXI | x | x | | x | x | | x | | | x | x | | x | |
| JANICE | x | x | | x | x | | | | x | x | | | x | |
| MILES BRANCH | x | x | | x | x | | | | | x | | | | x |
| MOODY'S LANDING | x | x | | x | x | | | | x | x | | | x | |
| NEW AUGUSTA | x | x | | x | x | | | | | | | | | x |
| PINEY WOODS | x | x | | x | | | | | | | | | | |
| POINT LAUREL | x | x | | x | x | | | | | | | | | |
| RED CREEK | x | x | | x | x | | | | | x | | | x | |
| THOMPSON CREEK | x | x | | x | x | | | x | | x | x | | x | |
| **HOLLY SPRINGS N.F.** | | | | | | | | | | | | | | |
| CHEWALLA | x | x | | x | | | | | | | | | | |
| PUSKUS LAKE | x | x | | x | x | | | | x | x | | | | x |
| TILLATOBA LAKE | x | x | | x | x | | | | x | x | | | | x |
| **HOMO CHITTO N.F.** | | | | | | | | | | | | | | |
| CLEAR SPRINGS | x | x | | x | x | | x | x | x | x | x | | | x |
| MT. NEBO | x | x | | x | x | | x | | | x | | | | x |
| PIPELS LAKE | x | x | | x | x | | x | | x | x | | | | x |
| WOODMAN SPRINGS | x | x | | x | x | | | | | | | | | |
| **TOMBIGBEE N.F.** | | | | | | | | | | | | | | |
| CHOCTAW LAKE | x | x | | x | x | x | x | x | x | x | x | x | | x |
| DAVIS LAKE | x | x | | x | x | | x | x | x | x | | | | x |

## Map 8
## NATIONAL FORESTS IN MISSISSIPPI



SOURCE: U. S. Department of Agriculture, Forest Service, Southern Region, *Recreation Guide to Southern National Forests.*

Mississippi Research and Development Center

There are also two Registered Natural Landmarks in Mississippi, the Mississippi Petrified Forest in Madison County and the Chestnut Oak Disjunct in Calhoun County. The Petrified Forest contains one of the few remaining natural accumulations of petrified wood east of the Mississippi River. The Chestnut Oak forest was selected as the best representation of roughly 1,000 acres in which chestnut oak is present in the forest composition.

### *State*

Three primary State agencies provide recreational facilities throughout the State – the Mississippi State Park System, the Mississippi Game and Fish Commission and the Mississippi State Highway Department. There are in addition four functioning agencies which have the responsibility for planning water and shoreline development in their respective districts.

The Mississippi State Park System provides 13,721 acres of park lands. While it has more intensive facility development on its lands than any other agency in the State, most of the parks are still underdeveloped. Chart 1 gives the existing State Parks and their major facility developments. A large percentage of facility development was in the 1930's, as identified by the red figures, and was constructed or developed by the Federal government under the CCC and WPA programs. These facilities, despite their age and overuse, are still providing a significant portion of the opportunities for active state park participation. It is imperative for reasons of safety and sanitation that many of these facilities be replaced. The quality of the outdoor recreation experience should be a decisive influence in facility replacement and development.

Moreover, as the major state supplier of multiple-use areas, the Park System has a responsibility to serve all the people of Mississippi to the best of its ability. It also has responsibility for satisfying the needs of visitors to Mississippi. Map 9 shows existing State Parks and their related location to urban areas and tourist routes. It also shows the four existing Corps of Engineers reservoirs and the Ross Barnett Reservoir in central Mississippi. While park lands are more evenly distributed throughout the State than the reservoirs, there are still important areas which are not served effectively. Most striking are the Jackson metropolitan area, and the Gulf Coast, the two most highly urbanized areas in Mississippi.

Mississippi boasts more than 1.5 million acres of prime game habitat under the jurisdiction of the Mississippi Game and Fish Commission. The Commission provides 14 wildlife management areas scattered throughout the State for public hunting. These game areas receive intensive wildlife management and development practices to upgrade hunting in the State. Most of the Game and Fish Commission's acreage for public hunting is provided by cooperative agreement between the Commission and the U. S. Forest Service and lease agreement between corporations and individuals. Only a small percentage of the total acreage of these areas is actually owned in fee title by the Commission. In addition to the 14 upland game hunting areas, the Commission is proposing to create four new areas and a major expansion of acreage in the existing management areas. With the proposed and existing area, the upland game management program will consist of 18 areas ranging from 4,000 to 350,000 acres in size that will total about 1,333,000 acres.

## Chart 1
## EXISTING FACILITIES IN STATE PARKS

| | R CLARKCO (1932) | R TOMBIGBEE (1932) | R ROOSEVELT (1934) | R TISHOMINGO (1934) | R WALL DOXEY (1934) | R HOLMES CO. (1936) | R LEROY PERCY (1936) | R PERCY QUIN (1936) | MAGNOLIA (1940) | PAUL JOHNSON (1948) | JOHN KYLE (1952) | CARVER POINT (1954) | HUGH WHITE (1954) | J. P. COLEMAN (1956) | SUB–TOTAL | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PARK LANDS (ACRES) | R 792 | R 522 | R 562 | R 1,400 | R 855 | R 570 | R 2,442 | R 2,221 | | | | | | | R 9,364 | 13,721 |
| | | | | | | | | | 200 | 805 | 740 | 750 | 420 | 1,442 | 4,357 | |
| LODGE (NUMBER) | R 1 | R 1 | R 1 | R 1 | R 1 | | | R 1 | | | | | | | R 6 | 11 |
| | | | | | | | 1 | | | | 1 | 1 | 1 | 1 | 5 | |
| CABINS (NUMBER) | R 12 | R 10 | R 12 | R 5 | R 6 | R 6 | R 7 | R 17 | | | | | | | R 75 | 129 |
| | | | | | | | | 2 | 9 | 12 | 10 | 2 | 11 | 8 | 54 | |
| GROUP CAMP (CAPACITY) | | | R 150 | R 110 | | | | R 200 | | | | | | | R 460 | 640 |
| | | | | | | 100 | 80 | | | | | | | | 180 | |
| UTILITY SYSTEMS (ELECTRICAL, SEWER, AND WATER) | R × | R × | R × | R × | R × | R × | R × | R × | | | | | | | R 8 | 14 |
| | | | | | | | | | × | × | × | × | × | × | 6 | |
| BATH HOUSE (CAPACITY) | R 60 | | R 40 | R 60 | R 45 | R 25 | | R 70 | | | | | | | R 300 | 400 |
| | | | | | | | 40 | | | 60 | | | | | 100 | |
| SWIMMING POOL (CAPACITY) | | | | R 160 | | | R 145 | | | | | | | | R 305 | 455 |
| | | | | | | | | | | | 50 | | 50 | 50 | 150 | |
| SWIMMING BEACH (CAPACITY) | R 600 | R 250 | R 400 | | R 450 | | | R 700 | | | | | | | R 2,400 | 3,000 |
| | | | | | | 300 | | | | 300 | | | | | 600 | |
| BOAT HOUSE OR DOCKS (NUMBER) | | | R 1 | | R 1 | | | R 1 | | | | | | | R 3 | 7 |
| | | | | | | | | | 1 | 1 | | | 1 | 1 | 4 | |
| CAMP GROUNDS (CAPACITY) | | | | | | | | | | | | | | | | 434 |
| | 32 | 30 | 51 | | | 34 | | 120 | | 102 | | | | 65 | 434 | |
| PICNIC GROUNDS (ACRES) | | R 4 | R 2 | R 3 | R 3 | R 3 | R 3 | R 4 | | | | | | | R 22 | 103 |
| | 6 | | 4 | | 4 | | 5 | 2 | 9 | 21 | 3 | 12 | 3 | 12 | 81 | |
| PICNIC SHELTERS (NUMBER) | R 1 | R 1 | R 1 | R 1 | R 1 | | | R 1 | | | | | | | R 6 | 27 |
| | 1 | | 3 | | 2 | 2 | 2 | 1 | | 5 | 1 | 1 | 1 | 2 | 21 | |
| PLAYGROUNDS (ACRES) | | | | | | | | | | | | | | | | 9 |
| | | 1 | 2 | | 1 | | | 2 | 1 | 1 | | | | | 9 | |
| CONCESSION BLDG. (NUMBER) | R 1 | | R 1 | 1 | R 1 | | | | | | | | | | R 4 | 10 |
| | 1 | | | | | | | 1 | 1 | 1 | | | 1 | 1 | 6 | |
| RECREATION BLDG. (NUMBER) | | | | | | | | | | | | | | | | 3 |
| | | | | | 1 | 1 | | | | | 1 | | | | 3 | |
| SUPERINTENDENT'S HOME (NUMBER) | R 2 | | R 1 | R 1 | R 1 | R 1 | R 1 | R 1 | | | | | | | R 8 | 9 |
| | | | | 1 | | | | | | | | | | | 1 | |

R RED FIGURES INDICATE FACILITIES CONSTRUCTED BY C.C.C. (1932–1939) AND STILL IN USE
BLACK FIGURES INDICATE FACILITIES CONSTRUCTED BY THE STATE OF MISSISSIPPI (1940–1967)
DATES REPRESENT YEAR OF PARK DEDICATION

SOURCE: Mississippi Park System

Mississippi Research and Development Center

The Commission also operates six waterfowl management areas of approximately 32,175 acres, which are supplemented by the public waterfowl hunting land on Mississippi's five major reservoirs (see Map 10).

In addition to the wildlife and waterfowl management areas, the Commission operates 20 fishing lakes and one public fisherman access point on a major river oxbow lake and a number of fisherman access points on streams located across the State.

The Commission has conducted field surveys of every stream in the State for potential fisherman access points and has identified sites on each major stream that are suitable for construction of boat launching ramps and related facilities. These potential sites are not shown on the district maps because further reconnaissance and research are needed in selecting priorities for future development. Individual inventory records for each site are on file. The Commission has identified interstate and intrastate streams which have a significant value for fish and wildlife, scenery and recreation. These streams are listed in the *Appendix* to the Plan, Appendix 1-D. Map 11 shows these scenic and recreational streams recommended for designation. Studies should be carried out to determine the feasibility of developing these streams into scenic or recreational streams by leaving them in their natural state or with improvement to make them more accessible and usable. As shown in this Plan, water-based recreation is the most popular recreational activity. Fishing is the number one activity with other water-based recreation gaining rapidly in popularity. It is essential that Mississippi have water available to handle the use pressure from recreation participants seeking opportunities for this type recreation.

The Mississippi State Highway Department maintains 98 roadside parks throughout the State. On an average, each park consists of two acres of land and has four picnic tables. The Department has also selected several parks on major highways and has programmed additional facilities which will include modern comfort stations, picnic tables, and shelter buildings.

Thirty roadside rest areas are programmed for development along the Interstate highway system within Mississippi. These rest areas, on an average, will consist of eight acres of landscaped land, with one comfort station and four shelter buildings, each with a table and grill and eight concrete picnic tables, not under shelters, with grills and tow water fountains. While residents of nearby towns may use the parks and rest areas as a supplement to other recreation activities, the parks and rest areas are designed primarily for travelers.

The Mississippi State Highway Department and the Department of Commerce, Bureau of Public Roads, conducted a study to determine scenic roads in the State. This study included existing highways and roads as well as potential areas which offer a unique value for scenic or natural beauty for future scenic or parkway roads. Map 12 shows these scenic roads, both existing and potential. These roads, when developed, will provide a major resource for outdoor recreation.

Mississippi has been divided into nine geographical regions according to major river drainage areas. Appendix 1-D lists the river basins and their main streams, interstate and intrastste, and gives primary use classification or recommended classification. These streams make a significant contribution to the State's fish and wildlife resources. The recommended scenic streams are shown on Map 11, page 34, and are listed in Appendix 1-D.

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There are four functioning district agencies charged with the responsibility of planning water and shoreline development of streams in the basins, which includes development and operation of recreational areas and facilities. These agencies coordinate and cooperate with the U. S. Army Corps of Engineers and the USDA Soil Conservation Service on many of their projects.

The Tombigbee River Valley Water Management District has managing authority in the 11 counties which make up the Tombigbee River Basin. Two additional counties are in the process of becoming member counties. The District has plans for major recreational development on the Tombigbee River, primarily in the reservoir areas along the authorized Tennessee–Tombigbee Waterway. In addition to the main stream projects, the District has several smaller projects scattered throughout its 11-county area.

The Pearl River Basin has two State agencies charged with planning and development of its water resources. The Pearl River Valley Water Development District is responsible for basin-wide development in 11 counties. The Pearl River Basin is now under interagency study to determine the feasibility of certain future projects. In addition to the interagency study, the District is conducting a site location study to locate various water parks along the main stem of the Pearl River. These water parks will be related to the Pearl River Boatway Project of the U. S. Army Corps of Engineers.

The second district agency which is concerned with the Pearl River is the Pearl River Valley Water Supply District. This district is made up of five counties and has managing and development authority over the Ross Barnett Reservoir. While the reservoir itself has greatly increased recreation opportunities in the most populous part of the State, its shoreline has not been adequately developed to serve the public's recreation needs. The State has a responsibility to provide a multiple-use area for the use of Jackson area residents, either through the State Park System or through the Water Supply District.

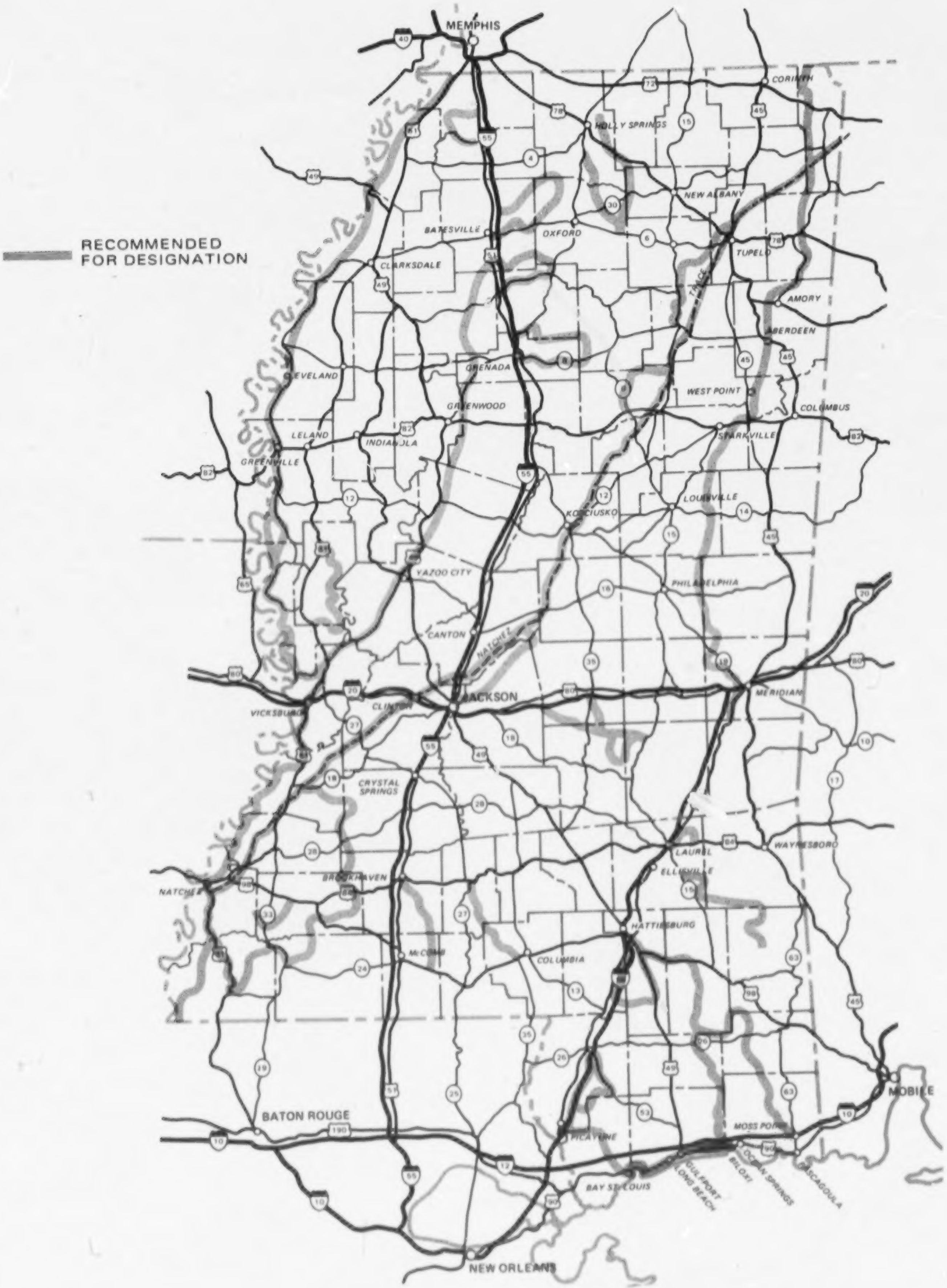
The Pascagoula River Basin is the oldest and largest organized district of the four districts. Its managing authority is vested in the Pat Harrison Waterway District. The District has firm plans for main stem development of the Pascagoula River and of feeder streams throughout the Basin.

The North Independent Streams Basin, the Yazoo River Basin, the Coastal Basin and the South Independent Streams Basin, at this time, do not have a state organization charged with management and development. That portion of the Tennessee River Basin Management District in which streams are located in Mississippi is headquartered in Alabama and for the most part, its projects are in Alabama with only limited planning and development in Mississippi.

The U. S. Army Corps of Engineers and the Soil Conservation Service, along with local watershed management districts, provide some planning and development in these basins. For example, the Soil Conservation Service, along with local watershed organizations, has approximately 30 PL-566 watershed projects programmed for development statewide that will provide some recreational opportunities.

## Map 12

## SCENIC AND RECREATIONAL ROADS RECOMMENDED FOR DESIGNATION



SOURCE: U. S. Department of Commerce, Bureau of Public Roads.

Mississippi Research and Development Center

The Mississippi Department of Archives and History, while not directly concerned with building and operating areas for general recreation, does play a vital role in the overall state scheme for the selection of areas for future development. The Department has identified areas of archeological and historical importance that offer potential for recreational development. These sites are listed below along with some comments and description.

*Archeological Sites*

1. Nanih Waiya, Winston County – Nanih Waiya is the legendary birthplace of the Choctaw Indians and is an important site for the proposed Pearl River Boatway. The site is presently under the jurisdiction of the Mississippi Park System.
2. Winterville Mounds, Washington County – Recent archeological excavations revealed that these mounds were erected around 1000 A.D. They were inhabited by members of the Mississippian culture, predecessors of the historic tribes. The site is also under the jurisdiction of the Mississippi Park System. Facilities include a museum-visitors center and a picnic area.
3. Selsertown or Emerald Mound, Adams County – The mound dates from around 1300 A.D. and is one of the largest mounds in the Mississippi Valley. Located adjacent to the Natchez Trace Parkway, this site is under the jurisdiction of the National Park Service.
4. Lake George-Holly Bluff Site, Yazoo County – This site is already entered in the *National Register of Historic Places,* maintained by the Office of Archeology and Historic Preservation, a division of the National Park Service. The site has been excavated.
5. Fatherland Plantation Site, Adams County – This site served as the Grand Village of the Natchez Indians. Located approximately three miles southeast of Natchez, it was excavated in 1930 and again in 1962. It is a Registered National Historic Landmark.
6. Jaketown Site, Humphreys County – Jaketown is a large village site with several mounds. One of the most important Poverty Point sites, it dates back into the B.C. period.
7. Lyon's Bluff Site, Oktibbeha County – Lyon's Bluff is the legendary site of the Chocchuma massacre; however, recent excavations tend to disprove this, and it presently appears that the site may have been inhabited by predecessors of the Chickasaws. Accessibility to the site is not good at the present.
8. Pocahontas Mounds, Hinds County – The site dates around the Sixteenth Century and may have been built by the Tunica Indians. Presently, there is a roadside park with complete comfort facilities developed by the Mississippi State Highway Department.
9. Several archeological sites near the Moon Lake area, Coahoma County – These sites are very accessible, and the North Delta Archeological Chapter is interested in developing this area.

*Territorial Mississippi*

1. Ford Home, Marion County – Built in the early Nineteenth Century, the home was the site of the Pearl River Convention in 1816 and it was visited by Andrew Jackson. It is operated as a museum and historic site by the Marion County Historical Society and is an important site for the proposed Pearl River Boatway.

2. Jefferson College, Adams County – The college was chartered in 1802. Jefferson Davis attended school here briefly, Audubon taught here, and the grounds were the site of Aaron Burr's arraignment before the territorial court. It was also the site of the 1817 Constitutional Convention.
3. French Camp, Choctaw County – Founded in 1812, French Camp was a trading stand of Louis Lefleur, father of Greenwood Leflore. A Presbyterian mission was established here in 1818. Its history is linked with that of the Natchez Trace. A local historical society has begun to plan for restoration and development.
4. Rosemont, Wilkinson County – Rosemont was Jefferson Davis' boyhood home. Privately owned, it is in dire need of restoration and development.
5. Fort Adams, Wilkinson County – Fort Adams was a territorial fort site on the Mississippi River. The French referred to the area as Davion's Rock, and the British called it Loftus Heights. James Wilkinson once served here. Local persons have given thought to reconstruction of the Fort, but accessibility is poor at present.
6. Natchez Trace Parkway – A vast park containing numerous archeological and historical attractions, the Trace is operated by the National Park Service.
7. Pine Ridge Presbyterian Church, Adams County – The church was organized in 1807 and the Mississippi Presbytery was formed here in 1816. There is a nature park with the church property of approximately 16 acres.
8. Sam Dale State Park, Lauderdale County – A park and monument commemorate Sam Dale, pioneer soldier, scout, and hero of the War of 1812. Dale's remains were removed to this spot.

### *Antebellum Mississippi*

1. Rodney, Jefferson County – Rodney was an early Nineteenth Century river town whose decline was brought about by the meandering Mississippi River. The town was bombarded by Federal gunboats during the Civil War. The Rodney Foundation has begun restoration of the Presbyterian Church here and has recently acquired the Catholic Church. The Mississippi Legislature at its 1968 session appropriated $40,000 for this project.
2. Grand Gulf, Claiborne County – An important Mississippi River town in the early 1800's, it was also a Confederate fort and stronghold below Vicksburg. Grand Gulf Museum is operated by the Grand Gulf Commission.
3. Windsor Ruins, Claiborne County – Majestic columns are the only remaining evidence of the antebellum and postwar home. Deterioration and vandalism threaten rapid extinction of the ruins.
4. Auburn Plantation, Washington County – The site has archeological remains of a historic antebellum plantation. Located near Lake Lee, the site is very accessible.

### *Civil War Sites*

1. Fort Massachusetts, Ship Island, Harrison County – Ship Island is proposed for inclusion in the Gulf Islands National Seashore, along with Cat, Horn, and Petit Bois Islands. The history of these islands goes back to the French colonial period and they were also involved with the

War of 1812. Fort Massachusetts was begun through the efforts of Jefferson Davis, Secretary of War, prior to the Civil War and it was occupied by Federal troops during the war.

2. Site of Battle of Port Gibson, May 1, 1863, Claiborne County – A series of small parks and interpretation centers tracing Grant's Vicksburg campaign of 1863 should be considered.
3. Site of Battle of Raymond, May 12, 1863, Hinds County – The Battle was a phase of Grant's campaign against Vicksburg.
4. Battlefield Park and Livingston Park, Jackson, Hinds County – The parks were scenes of skirmishes in Jackson during the Civil War, May and July, 1863. Plans are underway by "Keep Jackson Beautiful" for preservation and interpretation of Civil War trenches in Battlefield Park.
5. Site of the Battle of Champion's Hill, May 16, 1863, Hinds County – The Battle was one of the most critical phases of Grant's campaign against Vicksburg. The property is privately owned and is in dire need of protection, preservation, and development. The area has been greatly damaged by "amateur historians" with metal detectors. It is not very accessible from Highway 80.
6. Site of the Battle of Big Black River, May 17, 1863, Hinds County and Warren County – Confederate troops were routed here and retreated into Vicksburg.
7. Vicksburg National Military Park, Warren County – The Park commemorates the siege of Vicksburg, May 18 to July 4, 1863. It is operated by the National Park Service.
8. Site of the Battle of Brice's Crossroads, June 10, 1864, Lee County – The Battle is described by many historians as Nathan Bedford Forrest's greatest victory. The park is administered by the National Park Service.
9. Fort Pemberton Site, Greenwood – There is a local project with plans for a museum and park at the site.
10. Tupelo National Battlefield, Lee County – The Battlefield is already entered in the *National Register* and is administered by the National Park Service.

*Postwar Mississippi*

1. Beauvoir, Jefferson Davis Shrine, Harrison County – The last home of Jefferson Davis, Beauvior is preserved by the Sons of Confederate Veterans.
2. Pearl River Reservoir – Archeological history of this area should be taken into consideration for interpretation.

Sites less than 50 years old generally are not considered for nomination to the *National Register*; therefore, there is only a brief list under the heading, "Postwar Mississippi."

*Local*

On the county level of government, four counties – Hinds, Lowndes, Oktibbeha and Rankin – operate county recreation areas. These areas are primarily lake areas with shoreline development for recreation. Several of the lakes are under joint management by the county board of supervisors and the Mississippi Game and Fish Commission. Other counties in the State have county lakes that are operated solely for fishing. Two counties, Washington and Humphreys, have active county recreation committees and have several projects proposed, but at this time they are not managing and operating recreation areas.

Sixteen municipalities – Clarksdale, Greenville, Yazoo City, Cleveland, Tupelo, Amory, Vicksburg, Jackson, Meridian, Natchez, Brookhaven, Hattiesburg, Gulfport, Biloxi, Pascagoula and Moss Point – provide full-time, year-round park and recreation programs for their residents. These programs are geared toward urban-related activities and are meeting a vital need in the State for recreation.

In addition to the 16 cities with functioning full-time recreation departments, most cities with a population of 5,000 or more provide some type of summer recreation program. These programs are generally conducted through the municipal school system and receive some support from the municipality.

*Private*

The organizations and individuals which provide semipublic, commercial and private areas and facilities play a vital role in meeting the demand for outdoor recreation participation in Mississippi by providing 1,294,362 acres of land. The developed nonpublic 23,197 acres of recreation land is only 9,000 acres less than the combined developed area acreage provided by the State, Federal and local governments. A large percentage of this acreage is in church camps and country clubs, with the remainder in commercial and private facilities concentrated around recreational areas throughout the State.

The nonpublic sector also provides 1,271,165 acres of natural environment lands. This acreage is primarily used by hunting and fishing clubs.

## SUMMARY OF MISSISSIPPI'S RECREATION RESOURCES

Mississippi offers numerous recreational opportunities, although there is a great need to make these opportunities more accessible and usable. A total of 3,640,699.4 acres of land, wetlands and water is available for recreational use. The bulk of this acreage – 3,255,710 acres – is included within the National Forest and Wildlife Management areas or is public water acreage and is classified as Class III, Natural Environment Areas. Developed acreage for recreation provided by all levels of government and the private sector amounts to only 74,303.1 acres (or 31.51 acres per 1,000 population).

It should be noted that the Corps of Engineers in the past did not utilize zone use for recreational facilities. Therefore, picnickers may use camping sites, and campers may use facilities that are primarily designated for picnicking. In the district tabulations, the Mississippi Research and Development Center has attempted to separate and differentiate between camping table units and those tables used primarily for day-use activities, thereby creating a discrepancy between Corps figures and Research and Development Center figures on camping spaces located on the reservoirs.

Programmed acreage will provide an additional 93,700 acres of reservoir areas of which 25,500 will be surface water. It should be noted that the state inventory presented in these tables includes only those reservoir projects which have been authorized or are programmed as early action projects. Areas which have been programmed to receive intensive development for outdoor recreation will add an additional 37,435.4 acres.

Despite the seemingly enormous amount of land and water, three obstacles prevent its full utilization – distribution, accessibility and development. Although the national forests generally are well distributed across the State geographically, many State Parks are not well located with respect to rapidly urbanizing centers. Most of the available land and water is concentrated into a few large units more than thirty minutes' driving time from population centers. Access to much of the available land and water is inadequate. Even those areas not well located with respect to the population they should serve would provide more opportunities for recreational use if they were made conveniently accessible through the provision of roads, trails, and boat launching facilities. Also, most of the existing recreation areas are underdeveloped. While it is not possible to redistribute the existing acreage into smaller and more conveniently located blocks, future acquisition of land and water for public recreational use should be made in locations which will best serve the needs of the total population, particularly the major concentrations of population in urban areas.

Table 2 compares each of the 12 recreation planning districts by listing in rank order recreation acreage and selected facilities per 1,000 population. These rankings are based on data obtained in the supply inventory. It should be noted that when, in the narrative, reference is made to a district which provides good, moderate, average or poor opportunities for participating in certain activities, this comparison is based on the total number of facilities per 1,000 population in the district as compared to the other districts.

Table 2

## RANK ORDER OF RECREATION PLANNING DISTRICTS BY RECREATION ACREAGE AND SELECTED FACILITIES PER 1,000 POPULATION

| | Districts | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acreage | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Outdoor Recreation Acreage | | | | | | | | | | | | |
| Park and Recreation | 3 | 1 | 12 | 2 | 10 | 11 | 7 | 9 | 6 | 6 | 4 | 8 |
| Natural Environment | 9 | 12 | 7 | 10 | 8 | 2 | 6 | 11 | 5 | 1 | 3 | 4 |
| Reservoir Recreation | 1 | 3 | – | – | – | – | – | 2 | 4 | – | – | – |
| Grand Total | 3 | 11 | 8 | 10 | 9 | 2 | 7 | 12 | 5 | 1 | 4 | 6 |
| Acreage by BOR Classification | | | | | | | | | | | | |
| Class I (acres) | 8 | 6 | 4 | 10 | 11 | 2 | 12 | 9 | 1 | 5 | 7 | 3 |
| Class II (acres) | 3 | 1 | 12 | 2 | 9 | 10 | 7 | 11 | 5 | 6 | 4 | 8 |
| Class III (acres) | 3 | 12 | 8 | 10 | 9 | 2 | 7 | 11 | 6 | 1 | 4 | 5 |
| Class IV (acres) | – | – | – | – | – | – | – | – | – | – | – | – |
| Class V (acres) | – | – | – | – | – | – | – | – | – | – | – | – |
| Class VI (acres) | – | – | – | 5 | 2 | 6 | 3 | 1 | – | 3 | – | 7 |
| Facilities | | | | | | | | | | | | |
| Boating (suitable water acres) | 1 | 2 | 6 | 10 | 5 | 8 | 11 | 4 | 7 | 3 | 9 | 12 |
| Cabins and Motels (rental units) | 1 | 2 | 12 | 10 | 6 | 3 | 9 | 8 | 7 | 4 | 11 | 5 |
| Camping, Group (capacity) | 7 | 6 | 9 | 4 | 12 | 11 | 5 | 3 | 1 | 8 | 2 | 10 |
| Camping, Tent and Trailer (campsites) | 1 | 3 | 12 | 7 | 10 | 6 | 4 | 8 | 2 | 5 | 9 | 11 |
| Fishing (suitable water acres) | 1 | 7 | 3 | 11 | 6 | 2 | 9 | 4 | 8 | 5 | 10 | 12 |
| Hiking (trail miles) | 7 | 7 | 1 | 2 | 12 | 11 | 3 | 5 | 10 | 6 | 7 | 4 |
| Hunting (land and water acres) | 4 | 11 | 9 | 10 | 8 | 2 | 3 | 12 | 7 | 1 | 5 | 6 |
| Picnicking (tables) | 1 | 3 | 12 | 2 | 11 | 4 | 10 | 6 | 7 | 4 | 8 | 8 |
| Swimming (beach acres) | 2 | 4 | 11 | 6 | 12 | 7 | 9 | 10 | 3 | 8 | 5 | 1 |
| Swimming (pool square feet) | 6 | 3 | 10 | 4 | 9 | 2 | 12 | 1 | 8 | 7 | 5 | 11 |

## DISTRICT 1, GREAT LAKES

The existing supply of outdoor recreation areas and facilities in this District is characterized mainly by the large amount of reservoir recreation area. Almost five times as much reservoir area is in this District as in all the other districts combined. Recreation acreage and basic facilities are provided largely by the four U. S. Army Corps of Engineers reservoirs and the three State Parks located on them. Holly Springs National Forest, a few county areas, and some nonpublic regional areas provide the balance. Though there is a sizable amount of natural environment acreage (182,092 acres), the District ranks ninth in per 1,000 population acreage. City area acreage, largely nonpublic, is also relatively small with only 1.5 acres per 1,000 population.

With the reservoirs, State Parks and the National Forest Service developments at Lake Tillatoba, Chewalla Lake and Puskus Lake, the Great Lakes District provides the best opportunities in the State for boating, cabin and motel rental units, camping, fishing and picnicking. The 12 family campgrounds provide 1,029 sites for camping, more than all other districts combined.

Three major activity facilities are slightly below the State average. Group camping and hiking areas, both largely nonpublic, rank seventh among the districts. Swimming pool square footage, also largely nonpublic, is ranked sixth among the districts with 167.87 square feet of pool per 1,000 population. However, the shortage of swimming space is offset with 0.47 public beach acres per 1,000 population, ranking second only to the Gulf Coast.

Public hunting lands, including over 400,000 acres and private lands of 40,000 acres, afford moderate opportunities for hunting, ranking the District in fourth place among the 12 districts.

Activity facilities in which there is a marked shortage are archery ranges, parkway roads, all types of trails, and interpretive exhibits.

The existing four reservoirs – Arkabutla, Enid, Grenada and Sardis – offer an extremely high potential for further development along with expansions of John Kyle and Hugh White State Parks. In addition, Yocona Ridge State Park is scheduled to be opened in the summer of 1969, and another facility, Clear Creek State Park, is programmed for construction. These lakes with their related shoreline developments could become an even greater asset to the State in the field of outdoor recreation. Several factors make these lakes desirable for further development. First, basic facilities exist and acreage is available for major expansions. Second, visitation to these water bodies is second only to the Gulf Coast. Third, the lakes serve an interstate as well as an intrastate need for outdoor recreation. All four lakes are only a few miles off the main artery highway, Interstate 55, which connects New Orleans, Memphis, and Jackson. This highway provides access to 81,940 surface acres of freshwater for recreation within 30 minutes to two hours driving time of major urban centers of the South. The major negative factors to additional development are the flood control projects. At certain periods of the year, the water level is lowered to such a degree that it creates a hardship on recreationists seeking to use facilities which are water-oriented, particularly boat ramps.

Holly Springs National Forest, because of its vast acreage and close proximity to Memphis, offers an outstanding potential for further development. The forest acreage is presently included in the hunting acreage although this particular section of the forest is not under intensive game management for public hunting.

Existing major opportunities for water-based activities are provided by Arkabutla, Enid, Grenada, and Sardis Reservoirs; Carver Point, Hugh White, John Kyle, and Wall Doxey State Parks; and Horn Lake. Other opportunities, especially for hunting, are offered by Calhoun Wildlife Management Area, Sardis Reservoir Wildlife Management Area, Grenada Reservoir Wildlife Management Area, and Arkabutla Reservoir Wildlife Management Area.

## DISTRICT 1

1. Arkabutla Reservoir
2. Enid Reservoir
3. Grenada Reservoir
4. Horn Lake
5. Sardis Reservoir
6. Chewalla Lake Recreation Area
7. Puskus Lake Recreation Area
8. Tillatoba Lake Recreation Area
9. Carver Point State Park
10. Hugh White State Park
11. John Kyle State Park
12. Wall Doxey State Park
13. Clear Creek State Park (proposed)
14. Yocona Ridge State Park (proposed)
15. Holly Springs National Forest
16. Arkabutla Reservoir Wildlife Management Area (waterfowl)
17. Calhoun Wildlife Management Area
18. Grenada Reservoir Wildlife Management Area (waterfowl)
19. Sardis Reservoir Wildlife Management Area (waterfowl and upland game)
20. Enid Reservoir Wildlife Management Area (waterfowl) (proposed)

## DISTRICT 2, NORTH APPALACHIA

North Appalachia's park and recreation area acreage per 1,000 population is 73.61, greater than any other district's. With 6,000 acres in the Mississippi portion of Pickwick Lake, it is also one of the four districts having reservoir acreage. However, natural environment areas equal only 8,697 acres, or 96.96 acres per 1,000 population, placing it last among the districts in both total and per 1,000 acreage. The District also has little developed regional or city acreage.

Opportunities for boating and fishing are moderate, and hunting opportunities are low – a reflection of the low natural environment acreage. In sites per 1,000 population for family camping, however, North Appalachia leads all districts in trailer sites and is second in combined tent and trailer sites.

The existing major areas that offer opportunities for recreational activities are Coleman and Tishomingo State Parks, Goat Island Camping Area, Pickwick Lake, Dumas Lake, Holly Springs National Forest, and Yellow Creek Wildlife Management Area.

J. P. Coleman State Park, located on the shore of Pickwick Lake, offers one of the highest potentials for future development in the State. Facilities are being upgraded to accommodate the high use pressure the park is receiving. This park is the only major park located on an interstate waterway and receives heavy use from boaters using the Tennessee River. When the Tennessee – Tombigbee Waterway is completed, this use will multiply, placing the park in a triangle at the confluence of the two waterways. The backwaters of Pickwick Lake, Yellow and Indian Creeks make this park even more unusual in Mississippi by offering excellent opportunities for canoeing, fishing, and nature study.

Tishomingo State Park is unique in its natural beauty. The park is located in an area of huge rock outcroppings and rough terrain, very similar to the terrain and rock one would expect to find in the Smoky Mountains and not in northeast Mississippi. This park was designed and constructed during the 1930's by the National Park Service as a model State Park for Mississippi. Native stone was utilized in construction of most of the permanent structures. For many years this park has been more or less isolated and has received relatively low use pressure, but right-of-way for the Natchez Trace Parkway splits the park in half. Therefore, when this section of the Trace is completed, it will bring in excess of six million people a year through the Park.

The programmed Bay Springs Reservoir has a high potential for outdoor recreational development. This reservoir, when constructed, will be located on the authorized Tennessee – Tombigbee Waterway. Acreage for the project is not listed in the supply table[1] because it will not be undertaken in the next five years; however, the reservoir site is shown on the District map as it is an authorized project by the Corps of Engineers and will be undertaken when funded.

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[1] See *Appendix to the Mississippi Comprehensive Outdoor Recreation Plan*, Appendix I – C.

## DISTRICT 2

15. Holly Springs National Forest
21. Natchez Trace Parkway
22. Pickwick Lake
23. Bay Springs Reservoir (programmed)
24. Goat Island Camping Area
25. J. P. Coleman State Park
26. Tishomingo State Park
27. Dumas Lake
28. Yellow Creek Wildlife Management Area (waterfowl)
29. Macky's Creek Wildlife Management Area (proposed)

## DISTRICT 3, NORTH DELTA

The North Delta District has the smallest amount of park and recreation acreage of all the districts and the smallest amount per 1,000 population. There are no Federal developed areas and only six acres have been developed by the State, most of which are in a fisherman's access point on Moon Lake. Almost all county and regional lake acreage is nonpublic and the total is low compared with other districts. The District does have 123,070 acres in natural environment acreage which to some extent offsets the low figure for other recreation areas. These natural environment areas offer fairly good fishing opportunities due in part to the many natural lakes formed by changes in river channels; these lakes are somewhat better distributed than lakes in most other districts.

Unfortunately, the public opportunities for hunting are poor. It is recognized that there is much hunting on private lands under lease agreement with hunting clubs, but there are no public game management areas within the North Delta District. It should be noted that the Mississippi Game and Fish Commission has proposed 4,000 acres for public hunting in the North Delta District.

Boating facilities are moderate as compared to other districts in the State. The water acreage is quite sufficient for boating and water skiing, but the opportunities for participating in these activities are limited severely by a shortage of access, functioning facilities, and development.

Public facilities for camping and picnicking are quite rare but nonpublic facilities relieve some of the pressure for camping and picnicking. There is only one campground listed as a designated camping area at the public access point on Moon Lake. Only six picnic grounds, five of which are nonpublic, are listed for the District, with 0.25 table units per 1,000 population, the lowest figure in the State.

Opportunities for swimming in the North Delta District are also low on a per 1,000 population basis, but the District is ranked above average in the number of archery stands, with 0.25 per 1,000 population, or a total of 28. They are more numerous in this District than in any other section of the State.

The city of Clarksdale provides full-time, year-round recreation programs for its citizens. These programs and city facilities are oriented to community types of recreation and offer only limited opportunities for outdoor recreation except for summer sports and playground programs.

Existing development does not provide adequate opportunities for participating in outdoor recreational activities. In no other region is there a greater need for new facilities to provide for a variety of recreational activities.

The areas which provide limited opportunities for outdoor recreation at the present time include Flower Lake, Tunica Lake, Moon Lake, DeSoto Lake, and Stovall Lake. Major streams offering good potential opportunities for future development include the Mississippi, Coldwater, Big Sunflower, and Tallahatchie Rivers. The District does have one area, Moon Lake, that offers a high potential for a major recreation complex. This lake, located in the northern part of Coahoma County, is a natural oxbow lake with outstanding beauty.

## DISTRICT 3

30. DeSoto Lake
31. Flower Lake
32. Grassy Lake
33. Hampton Lake
34. Moon Lake
35. Stovall Lake
36. Swan Lake
37. Tunica Cutoff Lake
38. Askew Wildlife Management Area (proposed)

## DISTRICT 4, CENTRAL APPALACHIA

Central Appalachia District is notable for having a large amount of park and recreation acreage per 1,000 population, especially in regional, county, and Federal areas. The overall recreation area figure, however, is brought down by the low natural environment acreage – only 255.99 acres per 1,000 population. The major recreational opportunities are provided by Tombigbee State Park, Davis Lake Recreation Area located in Tombigbee National Forest, Lakes Lee and Monroe, and a portion of the Natchez Trace Parkway.

Boating facilities are limited, with only 5.29 acres of usable water per 1,000 population, 12 launching ramps, and no marina storage. Camping opportunities are also poor, as there are only nine cabins and motel units, and two family campgrounds. Fishing water acreage is low with 7.84 acres per 1,000 population. The hunting acreage is, of course, a major reflection of the low natural environment acreage.

Two cities, Tupelo and Amory, offer full-time, year-round recreation programs to their citizens. A third city, Aberdeen, is presently attempting to establish a municipal recreation program. Existing public city recreation acreage is relatively low, however, and the programs and facilities offered by the cities are oriented to community types of recreation and offer only limited opportunities for outdoor recreation with the exception of summer sports and playground programs.

One area which has high potential for recreation development is the Amory-Aberdeen Reservoir which will be constructed on the Tombigbee River in conjunction with the Tennessee-Tombigbee Waterway. Acreage for this reservoir is not included in the supply inventory table because this project will not be undertaken in the next five years. However, the reservoir site is shown on the District map as it is an authorized project of the Corps of Engineers and will be undertaken when funded.

### DISTRICT 4

15. Holly Springs National Forest
21. Natchez Trace Parkway
29. Macky's Creek Wildlife Management Area (proposed)
39. Amory–Aberdeen Reservoir (programmed)
40. Davis Lake Recreation Area
41. Old Natchez Trace Park (programmed)
42. Tombigbee State Park
43. Tombigbee National Forest
44. Lee Lake
45. Monroe Lake
46. Natchez Trace Visitor Center
47. Chickasaw Indian Village
48. Tupelo National Battlefield
49. Brice's Crossroads National Battlefield Site

## DISTRICT 5, SOUTH DELTA

Existing development in the South Delta District does not provide adequate opportunities for participation in the full spectrum of outdoor recreation activities, particularly in view of the District's high population density. The only activity in which facilities rank above average is golfing. There are two 18-hole and eight nine-hole golf courses in the District, ranking slightly above the State average. Only one of these courses is public.

The supply of facilities is especially poor for camping, swimming, picnicking, vacation rental units and all types of trails. Camping facilities are ranked tenth among the 12 districts. Moreover, present campgrounds are more or less designated areas for camping in the few developed facilities. The District ranks eleventh in picnicking, with only 79 existing picnic tables and few related facilities. The 0.5 acres of developed beach is the lowest figure in the State, as is existing trail mileage. Swimming pool square footage is ranked ninth and there are no facilities for archery or skeet and trap shooting.

Fairly good fishing and waterfowl hunting opportunities are available because of several large natural lakes formed by changes in river channels. These lakes, like those in the North Delta, are somewhat better distributed than in most other districts. Usable water for boating (9,950 acres) is above average, but facilities for boat launching and storage are poor except at the Greenville Marina. Several lakes provide limited opportunities for power boating, water skiing and primitive camping, though most of the shoreline is under private ownership. These lakes have high to medium desirability for major recreation site development. Lakes Addie, Bolivar, Four-Mile, Jackson, Little Eagle Macon, Six-Mile, Sky, Tchula, Tennessee Chute, Wasp, and Wolf supply fishing opportunities and few, if any, opportunities for other forms of recreation.

Hunting areas consist of 211,730 acres, but only 80,000 acres are open to the public; the remainder is under the management of private hunting clubs. The only lands within the region open to the public for hunting are found in the Sunflower and Issaquena Wildlife Management Areas, the Delta National Forest, and the Yazoo National Wildlife Refuge.

The South Delta District has a unique area in Winterville Mounds State Park and Museum. This park offers excellent facilities for historical interpretation of the Indian Temple Mound Builders (100–1300 A.D.), and for picnicking.

Two cities, Greenville and Cleveland, offer full-time, year-round recreation programs to their citizens. These programs and city facilities are oriented to community types of recreation and offer only limited opportunities for outdoor recreation except for summer sports and playground programs. Overall municipal park and recreation acreage is relatively low.

There are two areas within the South Delta District which are highly desirable as potential outdoor recreation sites: Lake Washington and Lake Ferguson–Warfield Point. Lake Washington has several positive factors which make it perhaps the most desirable area in the South Delta for a State or county park. It is located outside the levee and has convenient access to the shoreline by public road. The lake, with its natural beauty, has 5,000 acres of high-quality usable water. Less desirable factors for development are that all the shoreline is under private ownership and there are some esthetically undesirable developments around the lake in the form of commercial establishments and private fishing cabins and camps.

Lake Ferguson–Warfield Point also has several factors which make it desirable for recreational development. Warfield Point is county-owned land located at the confluence of Lake Ferguson and the Mississippi River. Lake Ferguson is one of the few major oxbow lakes that have water access into the Mississippi River. It is located adjacent to the major urban area of Greenville, and Warfield Point is only a ten-minute drive from downtown. If this area is developed, it will be the only major recreation facility on the Mississippi River in the entire lower river basin. Less desirable factors for development of Lake Ferguson–Warfield Point are that both areas are located inside the levee and are therefore subject to flooding during years of heavy rain or snow in the upper Mississippi River Basin, and that there is not a convenient public access road going into the Warfield Point Area.

Major rivers which offer good potential opportunities for boating and fishing include the Mississippi, Big Sunflower and Little Sunflower, along with Steele Bayou.

# DISTRICT 5

50. Addie Lake
51. Albermarle Lake
52. Beulah Lake
53. Bolivar Lake
54. Chotard Lake
55. Lake Ferguson
56. Four–Mile Lake
57. Jackson Lake
58. Lee Lake
59. Little Eagle Lake
60. Macon Lake
61. Six–Mile Lake
62. Sky Lake
63. Tchula Lake
64. Tennessee Chute Lake
65. Washington Lake
66. Wasp Lake
67. Whiting Lake
68. Whittington Lake
69. Wolf Lake
70. Barge Lake Recreation Area
71. Warfield Point Park (proposed)
72. Leroy Percy State Park
73. Delta National Forest
74. Winterville Mounds State Park and Museum
75. Issaquena Wildlife Management Area
76. Sunflower Wildlife Management Area
77. Sharkey County Wildlife Management Area (waterfowl) (proposed)
78. Yazoo National Wildlife Refuge

## DISTRICT 6, NORTH CENTRAL

The North Central District, the only district completely surrounded by other State territory, is ranked next to last in providing developed park and recreation areas (12.24 acres per 1,000 population) but is ranked second highest on natural environment acreage with 2,880.53 acres per 1,000 population, most of which is in natural lakes.

The major public recreational opportunities are provided by Holmes County State Park; a portion of the Natchez Trace Parkway; and Lakes Bee, Horseshoe, Pinchback, Legion, Tchula, Blue, Four-Mile, Henry, McIntyre, Mossy, Roebuck and Upper Six-Mile. Many of these, however, are located in the Yazoo River Basin, and a number have pollution from agricultural chemicals, making them less than desirable for recreation.

The existing supply of areas and facilities does not provide adequate opportunities for participation in outdoor recreation. The supply of facilities is especially poor for golf, boating, archery, and skeet and trap ranges.

Total facilities rank high for camping, hunting, fishing, picnicking, swimming, and trails. It should be noted, however, that most of these areas and facilities are nonpublic. Most of the camping, fishing, picnicking, swimming, and trail facilities are found in various church and scout resident camps. Of the four campgrounds, only one is a public family campground, and it is a designated area with most of its facilities programmed for development. The other three campgrounds and three of the four resident camps are nonpublic. The District's four golf courses are also nonpublic. District 6 is unique among the districts in that the majority of its fishing acreage is not public. Most of the natural river lakes are public water bodies, but they are surrounded by private lands. Actually, only 70 acres of the 21,341 have guaranteed public access. There are 354,630 acres for hunting, but all this acreage is nonpublic with most under lease agreement for hunting clubs.

## DISTRICT 6

21. Natchez Trace Parkway
79. Bee Lake
80. Blue Lake
81. Four-Mile Lake
82. Henry Lake
83. Horseshoe Lake
84. Legion Lake
85. McIntyre Lake
86. Mossy Lake
87. Pinchback Lake
88. Roebuck Lake
89. Tchula Lake
90. Upper Six-Mile Lake
91. Holmes County State Park
92. LeFlore Wildlife Management Area (proposed)
93. Hillside Floodway Wildlife Management Area (proposed)

## DISTRICT 7, SOUTH APPALACHIA

South Appalachia ranks third highest in the amount of natural environment acreage per 1,000 population (2,392.35 acres) although in total natural environment acreage, the District is ranked sixth. Developed park and recreation acreage is low with only 21.42 acres per 1,000 population, and city acreage is the lowest of all the districts.

The provision of facilities is especially poor for boating, vacation rental units, fishing, picnicking and swimming. Usable water for boating is almost critical, as the District is ranked in eleventh place with only 3.08 acres per 1,000 population or 490 acres, the lowest total in the State. As a result of the low surface water acreage, boat launching ramps are also few in number and there are no marina facilities. Swimming pool square footage per 1,000 population ranks last among the districts, developed picnic facilities are rare, and there are only 11 vacation rental units, all commercial or private. On the other hand, trail mileage far exceeds that of all other districts. As this district is expected to grow rapidly, particularly around the Columbus – Starkville – West Point urban area, facility development is crucial. Another factor which make facility deveopment desirable is the traffic volume on U. S. Highways 45 and 82 and on the Natchez Trace Parkway.

Areas which provide recreational opportunities are Tombigbee National Forest and Choctaw Lake Recreation Areas, a portion of the Natchez Trace Parkway, Noxubee National Wildlife Refuge, Lakes Lowndes, Oktibbeha, Lokafoma, and Bluff. Other opportunities, especially for hunting are offered by Choctaw Wildlife Management Area. Nanih Waiya Historical Memorial administered by the Mississippi Park System, offers a unique opportunity for interpretation although additional development is needed.

The reservoir that will be created by construction of the Columbus Lock and Dam on the Tombigbee River has high potential for development of outdoor recreation areas and facilities and would aid in meeting the need for more boating, fishing, and swimming waters. Acreage for this project is not included in the supply inventory table because this project will not be undertaken in the next five years; however, the reservoir site is shown on the District map as it is an authorized project by the Corps of Engineers and will be undertaken when funded.

### DISTRICT 7

21. Natchez Trace Parkway
43. Tombigbee National Forest
94. Bluff Lake
95. Columbus Reservoir (proposed)
96. Oktibbeha County Lake (programmed)
97. Choctaw Lake Recreation Area
98. Jeff Busby Park
99. Lowndes Lake Park
100. Lowndes Lake
101. Nanih Waiya Historical Memorial
102. Choctaw Wildlife Management Area
103. Noxubee National Wildlife Refuge

## DISTRICT 8, WEST CENTRAL

The major recreational opportunities in the West Central District are afforded by Ross Barnett Reservoir, the Pearl and Mississippi Rivers, a portion of the Natchez Trace Parkway, and Lakes Rankin County, Simpson County, Raymond, Dockery, George, Karnac, Yazoo, Centennial, Dump, Eagle, and Wolf. Hunting areas are limited to Copiah Game Management Area, the Pearl River Wildlife Management Area, and some areas of the Ross Barnett Reservoir. Vicksburg National Military Park, Grand Gulf State Military Park, the Natchez Trace Parkway, and the Mississippi Petrified Forest offer areas of historical importance.

The West Central District has two sites that are listed in the *National Register of Historic Places* – Holly Bluff Indian Mounds in Yazoo County and the Old Warren County Courthouse in the city of Vicksburg. In addition to the existing historical landmarks, application has been made to add the Old Hinds County Courthouse at Raymond to the *National Register of Historic Places*. The Petrified Forest located in Madison County is one of two areas in Mississippi designated as a Registered Natural Landmark.

The District has large amounts of acreage in some areas, but areas and facilities for several major activities are below the State average per 1,000 population. Developed park and recreational areas, including the large urban parks of Jackson, ranks ninth among the districts. Natural environment acreage is ranked eleventh. The grand total of acreage for recreation per 1,000 population is last among all districts.

Opportunities to participate in hunting, camping, swimming, cycling, and horseback riding are extremely low. Total acreage for hunting exceeds only one district which is the smallest district geographically and in population. Per 1,000 population, hunting acreage is ranked last among all districts, and the amount of hunting acreage programmed will not significantly alleviate the situation. The District has seven campgrounds and eight wilderness camping sites, but developed facilities are low for both family camping and cabin-motel units per 1,000 population, each ranking in eighth place. It should be noted that while resident camping is ranked third, with nine group camps, these facilities are all semipublic, commercial, or private. It should also be noted that swimming pool square footage, ranking first in the State, is somewhat misleading. In the supply table, the large municipal pools in Jackson are counted; these pools are now closed and do not provide opportunities to participate in swimming. Even without the large municipal pools, the square footage remains high for swimming pools, but beach acreage per 1,000 population is ranked in tenth place, providing only 0.03 acres per 1,000 population.

The development of Ross Barnett Reservoir near Jackson has greatly improved the opportunities for water-based sports such as waterfowl hunting, fishing, boating, and water skiing. This District ranks second only to the Great Lakes District in total reservoir acreage and in usable water for boating, but the per 1,000 figures of 59.59 for boating and 103.31 for fishing place the District fourth in both activities. Car and trailer parking spaces (1,530) and boat storage spaces in marinas (1,268) provide good overall boating facilities. The District has more picnic grounds, comfort stations, and shelters or pavilions than any other district. Table units rank second only to the Great Lakes District, but on a per 1,000 population basis, the District's picnicking facilities rank about average, with table units in sixth place among the districts.

Golfing facilities in the District lead the State with a total of 252 greens, or nine 18-hole courses and ten nine-hole courses. It should be noted that half of the public golf courses in the entire State, two 18-hole courses and two nine-hole courses, are in the West Central District.

Three cities – Jackson, Vicksburg, and Yazoo City – offer full-time, year-round recreation programs to their citizens. These programs are oriented to community types of recreation and offer somewhat limited opportunities for outdoor recreation except for summer sports and playground programs. However, facilities are provided in the large city parks for picnicking and nature appreciation. Overall municipal park and recreation acreage is relatively low, even though the District leads all other districts in municipal park and recreation acreage and in number of game fields and tennis courts.

A number of the existing areas which have high to medium potential for further development to aid in supplying areas and facilities to meet the increasing demand for outdoor recreation are Vicksburg National Military Park, Grand Gulf State Military Park, Ross Barnett Reservoir, and Centennial and Eagle Lakes. Of these areas, two have factors which make them extremely desirable for additional recreational development. The Ross Barnett Reservoir, which is located four miles outside the city of Jackson, provides 30,000 surface areas of recreational water and is ideal for a major park development. A major recreational complex on the Ross Barnett Reservoir would serve all of central Mississippi and perhaps a significant portion of the out-of-state demand for recreational facilities. The major resource, water, is present, but with the exception of boating facilities, land-based facilities are limited. Another feature which makes the Ross Barnett Reservoir highly desirable for development is that the Natchez Trace Parkway parallels the Reservoir for approximately 25 miles. This provides more than 6,000,000 visitors a year to the shoreline. The Reservoir has three major physical factors that are deterrents to future development: (1) a significant portion of the most desirable shoreline is zoned for and is being developed into residential areas, thereby prohibiting public use; (2) for the most part, the shoreline remaining for recreational development offers no easy access to deep water; and (3) the access roads leading into the Reservoir are poor and cannot accommodate the present weekend use pressure that is being placed on the facility.

A major recreational historical complex could be created around Grand Gulf State Military Park the city of Port Gibson (restored vista points on the banks of the Mississippi River), ruins of Windsor Mansion, ghost town of Rodney, Bruinsburg River Ferry, General Grant's inland march route, the Sunken Road, Port Gibson Battlefield Site, Pine Ridge Presbyterian Church, the Natchez Trace Parkway, and the proposed Great River Road Parkway. This area in Claiborne County has contributed significantly to both national and Mississippi history and could become the major historical recreation complex in the South.

Sites that have been identified as having a high potential for development for recreational uses are the Scutcheloe Hills, the Upper Strong River Reservoir, the Little Strong River Reservoir, and the Little Copiah Creek Reservoir. These three reservoir sites are all located within a 35-mile radius of Jackson and two are only a short distance off a major highway. The Scutcheloe Hills have been recommended by the National Park Service to be preserved in wild state as a nature preserve or wilderness area. These hills have outstanding natural beauty, very rugged terrain, and small streams that have low waterfalls of four to ten feet in height.

## DISTRICT 8

21. Natchez Trace Parkway
69. Wolf Lake
105. Centennial Lake
106. Dump Lake
107. Eagle Lake
108. George Lake
109. Hico Lake
110. Karnac Lake
111. Ross Barnett Reservoir
112. Rankin County Lake Recreation Area
113. Raymond Lake Recreation Area
114. River Bend Park
115. Rocky Springs Park
116. Homochitto National Forest
117. Dockery Lake
118. Simpson County Lake
119. Grand Gulf State Military Park
120. Holly Bluff Indian Mounds
121. Mississippi Petrified Forest
122. Old Warren County Courthouse
123. Ridgeland Visitor Center
124. Vicksburg National Military Park
125. Copiah (Henneberry) Game Management Area
126. Pearl River Wildlife Management Area
127. Pearl River Wildlife Management Area (proposed)

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## DISTRICT 9, EAST CENTRAL

Though it is the largest in area and fourth in population, the East Central District is a low-density, predominantly rural district. Developed park and recreation area acreage is somewhat low for county and regional areas and a little high for State and Federal areas. City area acreage of 1,303 – more than in any other district – is noteworthy, especially in a district with only one large city. District 9 has 401,556 acres in natural environment areas and 10,950 acres in reservoir recreation areas.

Opportunities are limited for fishing, boating, water skiing, and hiking, and the District ranks low, with the exception of car and trailer parking spaces, in areas and facilities for these activities. This indicates a real need for water-based recreational development. With the completion of the Okatibbee Reservoir near Meridian (open summer 1969) and other water development now in the planning stages, better opportunities for water-based recreation will be available.

Several activity facilities in the District have unusually low figures for such a large district, such as playgrounds, game fields, tennis courts, and trails. Camp facilities all rank high per 1,000 population. Trailer facilities are particularly good with 90 trailer sites, 170 tent or trailer sites, and two trailer dumping stations. Five resident camps have a combined capacity of 950 which makes this district the State leader in resident camps on a per 1,000 population basis.

The city of Meridian offers full-time, year-round recreation programs to its citizens. These programs and city facilities are oriented to community types of recreation and offer only limited opportunities for outdoor recreation except for summer sports and playground programs.

The major recreational opportunities are provided by Bienville National Forest; Clarkco and Roosevelt State Parks; Lakes Ross Barnett, Claude Bennett, Tom Bailey, Legion, and Long Creek; and a portion of the Natchez Trace Parkway. Bienville, Bucatunna, and Tallahala Creek Wildlife Management Areas offer hunting opportunities.

The Souinlovey Creek, Upper Bucatunna Creek, Tallahatta Creek, Tallahoma Creek, and Tallasha Creek Reservoir sites offer an excellent potential for future development but are at this time only potential projects with no development planned. The area within the District with the highest potential for more intensive development for outdoor recreation is perhaps the Bienville National Forest. This forest, located on the western edge of the District, is about halfway between two of the largest cities in the State, Jackson and Meridian, and could serve each equally when developed to its fullest potential.

## DISTRICT 9

21. Natchez Trace Parkway
128. Legion Lake
129. Long Creek Reservoir
130. Okatibbee Reservoir
131. Archusa Creek Reservoir (programmed)
132. Leaf River Reservoir (programmed)
133. Lobutcha Creek Reservoir (programmed)
134. Oakohay Creek Reservoir (programmed)
135. Tallahala Creek Reservoir (programmed)
136. Upper Pearl River Reservoir (programmed)
137. Yockanookany River Reservoir (programmed)
138. Marathon Recreation Area
139. Raworth Recreation Area
140. Shongelo Recreation Area
141. Roosevelt State Park
142. Clarkco State Park
143. Bienville National Forest
144. Claude Bennett Lake
145. Ross Barnett Lake
146. Tom Bailey Lake
147. Golden Memorial Park
148. Sam Dale Memorial
149. Bienville Wildlife Management Area
150. Bucatunna Wildlife Management Area
151. Tallahala Creek Wildlife Management Area
152. Okatibbee Reservoir Wildlife Management Area (proposed)

## DISTRICT 10, SOUTHWEST

The Southwest District is ranked slightly below average in park and recreation acreage per 1,000 population with 24.21 acres of 4,189 total acres. Although the District ranks third in usable water for boating, the number of facilities to accommodate the boating public is below average with a total of two marinas, storage for 35 boats, and only nine launching ramps. Also below average are trail mileage and facilities for swimming.

Opportunities for fishing, hunting, boating, picnicking, water skiing, and all forms of camping are moderate in the Southwest District. Most of the total acreage available for outdoor recreation is in natural environment areas with 503,176 acres, giving the District 2,908.54 acres per 1,000 population, the highest acreage in the State. This large acreage coupled with the small amount of general recreation areas give the Southwest District the lead in total acres for recreation, although development is limited.

Fishing and hunting are two kindred sports for which District 10 has good facilities. There are 15,323 acres of water for fishing and 479,666 acres of land and water for hunting, or 2,772.64 acres per 1,000 population, the highest figure in the State. The only other activity area in which the District ranks above average is outdoor game and sports fields.

The District has one area, Fatherland Plantation Site, which is a Registered National Historic Landmark.

Major opportunities for recreation are offered by the Homochitto National Forest, Percy Quin State Park, and Lakes Dixie Springs, Mary Crawford, Walthall, Foster, Mary, and Rodney. Public hunting opportunities are available in the Homochitto National Forest and the Adams County, and Homochitto Wildlife Management Areas.

The city of Natchez offers full-time, year-round recreation programs to its citizens. These programs are oriented to community types of recreation and offer somewhat limited opportunities for outdoor recreation except for summer sports and playground programs.

There are numerous potential opportunities for recreational development in the Southwest District including several historical or unique areas; lakes along the Mississippi River; the Mississippi, Homochitto, Buffalo, Amite, and Bogue Chitto Rivers; and the hills along these streams.

There are four existing resources in the District that offer a higher potential for development than now exists. Percy Quin State Park has a number of desirable factors which make it attractive for further development. This is the only State Park serving southwest Mississippi. Its visitor count is one of the highest in the State Park System, and it receives heavy out-of-state use pressure. Undeveloped land for expansion exists within the Park boundaries, and the Tanaipahoe River – which flows through the middle of the park – is a small but scenic stream offering good potential for development of a boat float stream. A factor that would perhaps retard future park development is the encroachment on park property by subdivisions.

Lake Mary, located in Wilkinson County, has several desirable factors for recreational development. First, it is the largest water body in southwest Mississippi, with 3,200 surface areas. The lake is an old Mississippi River oxbow lake and has potential for being an outstanding nature or wilderness area. With this lake as a pivot point, there is also high potential for a recreation/historical complex composed of Old Fort Adams and the Mississippi River Bluffs. Factors which are less than desirable for development include the isolation of the area from a major highway or urban area; the lake's location inside the levee with subsequent flooding; and a number of developments, primarily commercial fish camps and private cabins, which mar the esthetic beauty of the lake shoreline.

Jefferson Military College, located just north of Natchez at Washington, has major historical significance for the State of Mississippi. This complex is ideally located to serve as a major historical interpretive center for the Natchez Trace Parkway. The complex is State-owned, and although the buildings have started to deteriorate, they are still basically sound of structure.

A potential reservoir site has been identified by the Corps of Engineers on the Bogue Chitto River. This project, if developed, would provide a major water body for the eastern part of the District and would relieve some of the use pressure being placed on Percy Quin State Park. The site for the reservoir is just east of the city of McComb and only a few miles off Interstate Highway 55.

## DISTRICT 10

21. Natches Trace Parkway
116. Homochitto National Forest
153. Foster Lake
154. Lake Mary
155. Rodney Lake
156. Clear Springs Recreation Area
157. Mount Nebo Recreation Area
158. Pipes Lake Recreation Area
159. Woodman Springs Recreation Area
160. Brushy Creek Lake Recreation Area (programmed)
161. Percy Quin State Park
162. Dixie Springs Lake
163. Mary Crawford Lake
164. Walthall Lake
165. Emerald Mound Historic Site
166. Fatherland Plantation Site (Grand Village of the Natchez)
167. Mount Locust Historical Site
168. Adams County Wildlife Management Area
169. Homochitto Wildlife Management Area

## DISTRICT 11, SOUTHERN

The Southern District, though one of the largest districts in area and population, does not have many major developed recreational facilities which are above average. City, county, regional, and Federal acreage are all low, but with 4,014 acres in state area the district leads the State. The natural environment area category also has a high acreage figure with 459,366 total acres or 2,059.93 acres per 1,000 population.

Opportunities for fishing, boating, and water skiing are ranked among the lowest of the 12 districts. There are only 2,637 acres of usable water surface for boating, ranking the district ninth in the State and tenth for fishing waters. Camping facilities, with the exception of group camping, are low for the District. Facilities for family camping rank ninth, and cabin and motel rental units rank in eleventh place among the districts. There are only three group camps, but the capacity of these camps is relatively high, placing the District in second place in resident camp capacity. Activity facilities in which the District is lacking are archery and skeet and trap stands, and trail mileage. The Southern District also has no interpretive exhibits.

Hunting opportunities are among the best in Mississippi, primarily because of the vast amount of public natural environment areas within the DeSoto National Forest; the Chickasawhay, Wolf and Leaf Rivers Wildlife Management Areas; and the Marion County Game and Fish Area.

One city, Hattiesburg, has a full-time, year-round recreational program for its citizens. The program and city facilities are oriented to community types of recreation and offer only a limited opportunity for outdoor recreation except for summer sports and playground programs.

Areas which have a high potential for future development or additional development are Black Creek, and several reservoirs which have been tentatively located by the Corps of Engineers and the Pat Harrison Waterway District. Black Creek has been developed by the National Forest Service as a scenic float stream, and is a unique area, offering opportunities not found elsewhere in the State. This area offers a high potential for future development due to its uniqueness and scenic beauty.

Major recreational opportunities are afforded by the DeSoto National Forest; Paul B. Johnson State Park; Chickasawhay, Wolf, and Leaf River Wildlife Management Areas; Marion County Game and Fish Area; and Lakes Bogue Homo, Mike Connor, Jefferson Davis, and Perry. Major streams which presently offer only a limited opportunity for recreation participation include Chickasawhay River, Pearl River, Leaf River, and Black Creek. These streams offer an excellent potential for development as first-class recreational facilities.

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## DISTRICT 11

170. Bowie Creek Reservoir (programmed)
171. Kittrell Creek Reservoir (programmed)
172. Little Black Creek Reservoir (programmed)
173. Maynor Creek Reservoir (programmed)
174. Tiger Creek Reservoir (programmed)
175. Whetstone Creek Reservoir (programmed)
176. Ashe Lake Recreation Area
177. Black Creek Scenic Float Stream
178. Janice Recreation Area
179. Miles Branch Recreation Area
180. Moody's Landing Recreation Area
181. New Augusta Recreation Area
182. Piney Woods Recreation Area
183. Point Laurel Recreation Area
184. Red Creek Recreation Area
185. Thompson Creek Recreation Area
186. Columbia Water Park (programmed)
187. Turkey Fork Creek Recreation Area (programmed)
188. Paul B. Johnson State Park
189. DeSoto National Forest
190. Bogue Homo Lake
191. Jefferson Davis Lake
192. Lakeland Park Lake
193. Marion County Game and Fish Area
194. Mike Connor Lake
195. Perry County Lake
196. Chickasawhay Wildlife Management Area
197. Leaf River Wildlife Management Area
198. Wolf River Wildlife Management Area

## DISTRICT 12, GULF COAST

The Gulf Coast District is a unique area in the State because of its location bordering the Gulf of Mexico. Recreational facilities oriented to beach saltwater and general resort activities are prevalent.

Park and recreation acreage is generally low, but natural environment acreage, which includes the offshore islands, is 517,409 acres, highest of all the districts, The acres per 1,000 population figure for natural environment does not rank as high among the districts as the total figure.

Major recreational opportunities are afforded by the Mississippi Coast Parkway and Sand Beach, Magnolia State Park, Flint Creek Reservoir, DeSoto National Forest, Red Creek and Wolf River Wildlife Management Areas, the Pearl and Pascagoula Rivers, and the offshore islands, particularly Horn, Petit Bois and Ship.

Strangely, opportunities for freshwater fishing, swimming, boating, and water skiing appear to be quite low in the Gulf Coast District. Although Mississippi territory extends several miles into the Gulf of Mexico, saltwater acreage is not included in the inventory; therefore, fishing and boating water acreage reflects only freshwater areas and is misleading to some extent. Freshwater fishing acreage is only 6.18 acres per 1,000 population, lowest of all the districts. Saltwater-based activity facilities for boating and fishing are plentiful with 104 launching ramps and 41 marinas which offer storage spaces for 1,683 boats and full service facilities for boaters.

Existing camping facilities are low on a per 1,000 population basis and are exceeded by most districts, especially in tent and trailer sites. Similarly, existing picnicking facilities are low with only 343 tables, ranking the District in eighth place per 1,000 population. It should be noted that these facilities serve a heavy out-of-state use and the per 1,000 figure does not include this usage. The Gulf Coast District, with its man-made beach of approximately 730 acres plus the offshore island beaches, has a total of 2,554 acres of beach, the highest in the State. However, swimming pool and bathhouse square footage is low for this populous district, with only 105.82 square feet per 1,000 population. Other activities which rank low are nature trails, archery, and skeet stands; none of these are listed in the District.

The cities of Biloxi, Gulfport, Moss Point, and Pascagoula offer full-time, year-round recreation programs to their citizens. These programs are oriented to community types of recreation and offer somewhat limited opportunities for outdoor recreation.

Opportunities for saltwater fishing and boating are, of course, the best in the State. These opportunities are afforded by the Back Bay areas of Mississippi Sound and the entire Gulf of Mexico. The Gulf Coast District also ranks first in golfing facilities with 0.72 holes per 1,000 population.

Several existing areas with additional improvements and expansion could increase their potential for outdoor recreation. Bluff Creek Water Park, programmed for development by the Pat Harrison Waterway District, will become a major recreation area, adding significantly to the opportunities for camping and picnicking.

The Mississippi Coast Parkway and sand beach is a prime example of a resource which offers higher potential than it is now providing. This beach and saltwater body is the closest, and has the most direct access, to the heartland of the Nation. The Gulf Coast beach is the only major saltwater beach between Galveston, Texas, and the Alabama–Florida line, and affords opportunities for saltwater-based activities. The major limitation for future development is the pollution factor of water in the Mississippi Sound. Because of the shallowness of the water, much of the pollution and murkiness will never completely clear, but man-made pollution, primarily in the form of raw effluent and storm sewers which empty directly onto the beach and into the water, must be corrected. Another limitation is that encroachment on the waterfront by commercial interests is taking more beach acreage out of public use each year.

The DeSoto National Forest offers a prime opportunity for future development to aid in meeting the demand for outdoor recreation as most of the existing development consists of small scattered sites which are meeting only a small portion of the total need for outdoor recreation. Two developments within the forest, however, are unique in Mississippi. The southern terminal point of the Black Creek Float Stream is in this district, and the only true hiking trail within the State is also found here.

Beauvoir, the home of Jefferson Davis, has considerably more potential for historical interpretation and recreational uses than it is now providing. The basic resources of land and original buildings are existing and are in a sound state. The major limitation for development is the small amount of acreage within the complex.

There are two projects, one of which is programmed and the other proposed, which offer outstanding potential for outdoor recreation in the Gulf Coast District. These two projects will not only aid the district residents but will also help meet the State and interstate demand for outdoor recreation. The U. S. Army Corps of Engineers has a reservoir project programmed on the Escatawpa River. When this project is completed, it will offer 37,600 total acres of usable recreation lands, of which 14,000 acres will be in surface water and 23,600 acres in land. This reservoir will be the largest freshwater body in the southern half of Mississippi and will be located only 20 miles from the major growth centers of Pascagoula and the Mississippi Gulf Coast. Convenient access will be provided off Interstate 10 and U. S. Highway 90. This early action project has been authorized for development pending the availability of funds.

The major proposed project in the Gulf Coast District is one of national significance rather than only State and district significance. This project, Gulf Islands National Seashore, would include the Mississippi offshore islands of Cat, Horn, Petit Bois, and Ship. These islands are among the few remaining islands which are suitable for public recreation. The creation of the national seashore would provide access to the clean water and white sand beaches on the islands which is presently limited to a few individuals with large boats. This project is perhaps the most significant project for outdoor recreation in the State of Mississippi and the potential is unlimited.

Four potential sites for development of outdoor recreation activity facilities have been identified and are located in the Gulf Coast District. Jackson Ridge Recreational Park on the Mississippi Sound in Hancock County has been programmed by the State Park System and the Hancock Board of Supervisors, and will provide a much-needed park along the Gulf Coast.

The U. S. Army Corps of Engineers has tentatively identified two potential reservoir sites, one on Bluff Creek and another on Red Creek. If developed, these reservoirs could aid in providing freshwater activities for the entire district. The U. S. Forest Service has tentatively identified a potential basin for reservoir development within the DeSoto National Forest. If developed, this reservoir would primarily serve the Biloxi–Gulfport area with easy access off Highways 10 and 49. This is publicly-owned land and is a highly desirable project.

## DISTRICT 12

177. Black Creek Scenic Float Stream
189. DeSoto National Forest
198. Wolf River Wildlife Management Area
199. Flint Creek Reservoir
200. Escatawpa River Reservoir (programmed)
201. Airey Lake Recreation Area
202. Big Biloxi River Recreation Area
203. Mississippi Coast Sand Beach
204. Tuxachanie Hiking Trail
205. Bluff Creek Water Park (programmed)
206. Magnolia State Park
207. Jackson Ridge Recreational Park (programmed)
208. Fort Massachusetts
209. Gulf Islands National Seashore (proposed)
210. Red Creek Wildlife Management Area
211. Jourdan River (NASA) Wildlife Management Area (proposed)
212. Stone-Harrison Primitive Wildlife Management Area (proposed)

Table 3

## SUPPLY AND OPTIMUM PEAK DAY CARRYING CAPACITY OF TARGET RANGES

| District Number | Name of District | Archery Stands | | Gun Shooting Ranges | |
|---|---|---|---|---|---|
| | | Supply | Carrying Capacity | Supply | Carrying Capacity |
| 1 | Great Lakes | – | – | 4 | 80 |
| 2 | North Appalachia | 10 | 200 | – | – |
| 3 | North Delta | 28 | 560 | – | – |
| 4 | Central Appalachia | 13 | 260 | 6 | 120 |
| 5 | South Delta | 1 | 20 | – | – |
| 6 | North Central | 5 | 200 | 1 | 20 |
| 7 | South Appalachia | 26 | 520 | 3 | 60 |
| 8 | West Central | 20 | 400 | 14 | 280 |
| 9 | East Central | 3 | 60 | – | – |
| 10 | Southwest | 9 | 180 | – | – |
| 11 | Southern | 6 | 120 | 9 | 180 |
| 12 | Gulf Coast | – | – | – | – |
| | State | 121 | 2,420 | 43 | 860 |

Table 4

## SUPPLY AND OPTIMUM PEAK DAY CARRYING CAPACITY OF HUNTING AREAS

| District Number | Name of District | Supply (Acres) | Small Game Hunters Accommodated | Deer & Turkey Hunters Accommodated | Duck & Geese Hunters Accommodated |
|---|---|---|---|---|---|
| 1 | Great Lakes | 443,851 | 44,385 | 7,102 | 110,963 |
| 2 | North Appalachia | 11,107 | 1,111 | 178 | 2,777 |
| 3 | North Delta | 91,690 | 9,169 | 1,467 | 22,923 |
| 4 | Central Appalachia | 37,144 | 3,714 | 594 | 9,286 |
| 5 | South Delta | 211,730 | 21,173 | 3,388 | 52,933 |
| 6 | Central | 354,630 | 35,463 | 5,674 | 88,658 |
| 7 | South Appalachia | 375,562 | 37,556 | 6,009 | 93,891 |
| 8 | West Central | 29,056 | 2,906 | 465 | 7,264 |
| 9 | East Central | 398,882 | 39,888 | 6,382 | 99,721 |
| 10 | Southwest | 479,666 | 47,967 | 7,675 | 119,917 |
| 11 | Southern | 174,314 | 17,431 | 2,789 | 43,579 |
| 12 | Gulf Coast | 506,447 | 50,645 | 8,103 | 126,612 |
| | State | 3,111,079 | 311,108 | 49,777 | 777,770 |

### Table 5

### SUPPLY AND OPTIMUM PEAK DAY CARRYING CAPACITY OF RESIDENT CAMPS

| District Number | Name of District | Supply | Carrying Capacity |
|---|---|---|---|
| 1 | Great Lakes | 7 | 535 |
| 2 | North Appalachia | 3 | 234 |
| 3 | North Delta | 2 | 230 |
| 4 | Central Appalachia | 4 | 480 |
| 5 | South Delta | 1 | 100 |
| 6 | Central | 4 | 395 |
| 7 | South Appalachia | 4 | 480 |
| 8 | West Central | 9 | 1,324 |
| 9 | East Central | 5 | 950 |
| 10 | Southwest | 2 | 400 |
| 11 | Southern | 3 | 750 |
| 12 | Gulf Coast | 3 | 550 |
|  | State | 47 | 6,428 |

NOTE: Carrying capacities were given on area and facility survey forms; therefore, it was not necessary to compute these capacities.

### Table 6

### SUPPLY AND OPTIMUM PEAK DAY CARRYING CAPACITY OF GOLF COURSES

|  |  | 18–Hole Courses |  | 9–Hole Courses |  |
|---|---|---|---|---|---|
| District Number | Name of District | Supply | Carrying Capacity | Supply | Carrying Capacity |
| 1 | Great Lakes | 1 | 300 | 4 | 600 |
| 2 | North Appalachia | – | – | 4 | 600 |
| 3 | North Delta | 1 | 300 | 4 | 600 |
| 4 | Central Appalachia | – | – | 8 | 1,200 |
| 5 | South Delta | 2 | 600 | 8 | 1,200 |
| 6 | Central | 1 | 300 | 3 | 450 |
| 7 | South Appalachia | – | – | 3 | 450 |
| 8 | West Central | 9 | 2,700 | 10 | 1,500 |
| 9 | East Central | 3 | 900 | 4 | 600 |
| 10 | Southwest | 2 | 600 | 5 | 750 |
| 11 | Southern | 3 | 900 | 4 | 600 |
| 12 | Gulf Coast | 9 | 2,700 | 3 | 450 |
|  | State | 31 | 9,300 | 60 | 9,000 |

## Table 7

## SUPPLY AND OPTIMUM PEAK DAY CARRYING CAPACITY SWIMMING AREAS

| | | Beach Areas | | Pools | |
|---|---|---|---|---|---|
| District Number | Name of District | Supply (Acres) | Carrying Capacity | Supply (Square Feet) | Carrying Capacity |
| 1 | Great Lakes | 90 | 37,800 | 32,230 | 2,578 |
| 2 | North Appalachia | 17 | 7,140 | 18,700 | 1,496 |
| 3 | North Delta | 2 | 840 | 11,800 | 944 |
| 4 | Central Appalachia | 27 | 11,340 | 33,300 | 2,664 |
| 5 | South Delta | 1 | 420 | 23,400 | 1,872 |
| 6 | Central | 18 | 7,560 | 32,175 | 2,574 |
| 7 | South Appalachia | 10 | 4,200 | 15,000 | 1,200 |
| 8 | West Central | 14 | 5,880 | 114,835 | 9,187 |
| 9 | East Central | 72 | 30,240 | 30,222 | 2,418 |
| 10 | Southwest | 16 | 6,720 | 25,900 | 2,072 |
| 11 | Southern | 47 | 19,740 | 43,825 | 3,506 |
| 12 | Gulf Coast | 2,554 | 1,072,680 | 29,100 | 2,328 |
| | State | 2,867 | 1,204,140 | 410,487 | 32,839 |

## Table 8

## SUPPLY AND OPTIMUM PEAK DAY CARRYING CAPACITY OF PICNICKING FACILITIES

| | | Comfort Stations | | Picnic Tables | |
|---|---|---|---|---|---|
| District Number | Name of District | Supply Water Closets | Carrying Capacity | Supply (Tables) | Carrying Capacity |
| 1 | Great Lakes | 72 | 2,880 | 1,267 | 12,670 |
| 2 | North Appalachia | 41 | 1,640 | 106 | 1,060 |
| 3 | North Delta | 10 | 400 | 27 | 270 |
| 4 | Central Appalachia | 85 | 3,400 | 231 | 2,310 |
| 5 | South Delta | 42 | 1,680 | 79 | 790 |
| 6 | Central | 26 | 1,040 | 153 | 1,530 |
| 7 | South Appalachia | 44 | 1,760 | 138 | 1,380 |
| 8 | West Central | 175 | 7,000 | 464 | 4,640 |
| 9 | East Central | 113 | 4,520 | 237 | 2,370 |
| 10 | Southwest | 90 | 3,600 | 204 | 2,040 |
| 11 | Southern | 51 | 2,040 | 314 | 2,140 |
| 12 | Gulf Coast | 135 | 5,400 | 343 | 3,430 |
| | State | 880 | 35,200 | 3,416 | 34,160 |

## Table 9

### SUPPLY AND OPTIMUM PEAK DAY CARRYING CAPACITY OF BOATING AREAS AND FACILITIES

| District Number | Name of District | Boating Acres |  |  | Car & Boat Trailer Parking Spaces |  | Launching Ramps |  | Boat Storage Spaces |  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  | Supply (Acres) | Motor Boaters Accommodated | Nonmotor Boaters Accommodated | Supply (Spaces) | Carrying Capacity | Supply (Ramps) | Carrying Capacity | Supply (Spaces) | Carrying Capacity |
| 1 | Great Lakes | 82,450 | 24,735 | 68,434 | 149 | 224 | 67 | 3,350 | 145 | 145 |
| 2 | North Appalachia | 6,720 | 2,016 | 5,578 | 640 | 960 | 12 | 600 | 85 | 85 |
| 3 | North Delta | 4,790 | 1,437 | 3,976 | 320 | 480 | 23 | 1,150 | 40 | 40 |
| 4 | Central Appalachia | 831 | 249 | 690 | 100 | 150 | 12 | 600 | – | – |
| 5 | South Delta | 9,950 | 2,985 | 8,259 | 550 | 825 | 31 | 1,550 | 255 | 255 |
| 6 | Central | 3,465 | 1,040 | 2,876 | 66 | 99 | 16 | 800 | 80 | 80 |
| 7 | South Appalachia | 490 | 147 | 407 | 121 | 182 | 16 | 800 | – | – |
| 8 | West Central | 24,905 | 7,472 | 20,671 | 1,530 | 2,295 | 64 | 3,200 | 1,268 | 1,268 |
| 9 | East Central | 6,302 | 1,891 | 5,231 | 581 | 872 | 28 | 1,400 | – | – |
| 10 | Southwest | 10,655 | 3,197 | 8,844 | 395 | 593 | 9 | 450 | 35 | 35 |
| 11 | Southern | 2,637 | 791 | 2,189 | 605 | 908 | 21 | 1,050 | 100 | 100 |
| 12 | Gulf Coast | 750 | 225 | 623 | 598 | 897 | 104 | 5,200 | 1,683 | 1,683 |
|  | State | 153,945 | 46,184 | 127,774 | 5,655 | 8,483 | 403 | 20,150 | 3,691 | 3,691 |

Table 10

SUPPLY AND OPTIMUM PEAK DAY CARRYING CAPACITY
OF TRAILS

| | | Total Trails | | Bicycling and Jogging Trails | | Hiking Trails | | Horseback Riding Trails | | Nature Trails | | Pleasure Walking Trails | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| District Number | Name of District | Number of Miles | Carrying Capacity | Number of Miles | Carrying Capacity | Number of Miles | Carrying Capacity | Number of Miles | Carrying Capacity | Number of Miles | Carrying Capacity | Number of Miles | Carrying Capacity |
| 1 | Great Lakes | 24 | 2,326 | 3 | 270 | 9 | 576 | 5 | 80 | 7 | 1,400 | – | – |
| 2 | North Appalachia | 6 | 362 | 1 | 90 | 4 | 256 | 1 | 16 | – | – | – | – |
| 3 | North Delta | 22 | 1,570 | 1 | 90 | 20 | 1,280 | – | – | 1 | 200 | – | – |
| 4 | Central Appalachia | 33 | 2,376 | – | – | 27 | 1,728 | 3 | 48 | 3 | 600 | – | – |
| 5 | South Delta | 5 | 80 | – | – | – | – | 5 | 80 | – | – | – | – |
| 6 | Central | 13 | 1,040 | – | – | 2 | 128 | 7 | 112 | 4 | 800 | – | – |
| 7 | South Appalachia | 80 | 3,096 | – | – | 22.5 | 1,440 | 53.5 | 856 | 4 | 800 | – | – |
| 8 | West Central | 42.5 | 3,724 | – | – | 27 | 1,728 | 6 | 96 | 9.5 | 1,900 | – | – |
| 9 | East Central | 27 | 2,704 | – | – | 9 | 576 | 8 | 128 | 10 | 2,000 | – | – |
| 10 | Southwest | 17.5 | 1,700 | 4 | 360 | 10 | 640 | – | – | 3.5 | 700 | – | – |
| 11 | Southern | 10.7 | 753 | – | – | 10.2 | 653 | – | – | 0.5 | 100 | – | – |
| 12 | Gulf Coast | 57 | 2,604 | 6 | 540 | 26 | 1,664 | 25 | 400 | – | – | – | – |
| | State | 338 | 22,262 | 15 | 1,350 | 167 | 10,688 | 114 | 1,824 | 42 | 8,400 | – | – |

Table 11

## SUPPLY AND OPTIMUM PEAK DAY CARRYING CAPACITY OF FAMILY CAMPING FACILITIES

| | | Comfort Stations (Water Classes) | | Tent Sites | | Trailer Sites | | Developed Campsites | | Wilderness Campsites | | Cabin and Motel Units | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| District Number | Name of District | Supply | Carrying Capacity | Supply | Carrying Capacity | Supply | Carrying Capacity | Supply | Carrying Capacity | Supply | Carrying Capacity | Number of Units | Carrying Capacity |
| 1 | Great Lakes | 107 | 2,140 | 30 | 120 | 42 | 168 | 957 | 3,828 | 4 | 16 | 435 | 1,740 |
| 2 | North Appalachia | 18 | 360 | – | – | 20 | 80 | 60 | 240 | 2 | 8 | 58 | 232 |
| 3 | North Delta | 10 | 200 | 15 | 60 | 5 | 20 | 20 | 80 | 2 | 8 | 4 | 16 |
| 4 | Central Appalachia | 9 | 180 | 15 | 60 | 10 | 40 | 34 | 136 | 3 | 12 | 9 | 36 |
| 5 | South Delta | 8 | 160 | – | – | 30 | 120 | 35 | 140 | 5 | 20 | 46 | 184 |
| 6 | Central | 35 | 700 | 10 | 40 | 12 | 48 | 30 | 120 | 2 | 8 | 43 | 172 |
| 7 | South Appalachia | 52 | 1,040 | 20 | 80 | 30 | 120 | 44 | 176 | 4 | 16 | 11 | 44 |
| 8 | West Central | 107 | 2,140 | 15 | 60 | 15 | 60 | 118 | 472 | 8 | 32 | 45 | 180 |
| 9 | East Central | 47 | 940 | 42 | 168 | 90 | 360 | 171 | 684 | 5 | 20 | 41 | 164 |
| 10 | Southwest | 19 | 380 | 40 | 160 | – | – | 60 | 240 | 3 | 12 | 46 | 184 |
| 11 | Southern | 8 | 160 | – | – | 20 | 80 | 59 | 236 | 3 | 12 | 11 | 44 |
| 12 | Gulf Coast | 20 | 400 | 4 | 16 | 12 | 48 | 65 | 260 | 6 | 24 | 72 | 288 |
| | State | 440 | 8,800 | 191 | 764 | 286 | 1,144 | 1,653 | 6,612 | 47 | 188 | 821 | 3,284 |

Table 12

SUPPLY OF RECREATIONAL ACTIVITY FACILITIES FOR WHICH CARRYING CAPACITIES WERE NOT DISCERNIBLE

| District Number | Name of District | Marinas | Trailer Dumping Static.is | Indoor Recreation Activity Buildings | Amphi-theaters | Nature and Historical Exhibits | Group Shelters or Pavilions | Play-grounds | Outdoor Game Fields | Tennis Courts | Parkway Roads (Miles) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Great Lakes | 4 | 1 | 7 | – | 8 | 22 | 6 | 17 | 9 | – |
| 2 | North Appalachia | 4 | – | 3 | – | – | 2 | 3 | 17 | 2 | – |
| 3 | North Delta | 2 | – | 6 | – | 1 | 2 | 9 | 18 | 16 | – |
| 4 | Central Appalachia | – | – | 14 | 1 | 18 | 5 | 8 | 17 | 20 | 44 |
| 5 | South Delta | 2 | – | 7 | – | 3 | 1 | 1 | 21 | 15 | – |
| 6 | Central | 1 | – | 8 | – | 3 | 6 | 12 | 15 | 20 | 28 |
| 7 | South Appalachia | – | – | 6 | 1 | 23 | 1 | 13 | 25 | 19 | 41 |
| 8 | West Central | 6 | – | 13 | 3 | 72 | 30 | 13 | 60 | 71 | 57 |
| 9 | East Central | – | 2 | 9 | – | 4 | 8 | 2 | 9 | 8 | – |
| 10 | Southwest | 2 | – | 10 | 1 | 8 | 5 | 4 | 34 | 27 | 42 |
| 11 | Southern | 1 | 1 | 11 | 2 | – | 9 | 10 | 34 | 24 | – |
| 12 | Gulf Coast | 41 | 1 | 20 | – | 2 | 5 | 13 | 31 | 12 | – |
|  | State | 63 | 5 | 114 | 8 | 142 | 96 | 94 | 298 | 243 | 212 |

Table 13

SUPPLY OF PARK AND RECREATION AREAS
(ACRES)
1968

| District Number | Name of District | Total Park & Recreation Areas | City Areas | County or Metropolitan Areas | Regional Areas | State Areas | Federal Areas |
|---|---|---|---|---|---|---|---|
| 1 | Great Lakes | 6,992 | 295 | 1,337 | 875 | 2,975 | 1,510 |
| 2 | North Appalachia | 5,889 | 201 | 2,155 | 180 | 3,353 | – |
| 3 | North Delta | 1,140 | 603 | 305 | 226 | 6 | – |
| 4 | Central Appalachia | 6,274 | 318 | 3,843 | 330 | 1,131 | 652 |
| 5 | South Delta | 3,273 | 427 | 490 | – | 2,330 | 26 |
| 6 | Central | 2,173 | 713 | 470 | 420 | 570 | – |
| 7 | South Appalachia | 3,405 | 202 | 1,870 | 653 | 60 | 620 |
| 8 | West Central | 6,788 | 1,035 | 2,582 | 1,166 | 205 | 1,800 |
| 9 | East Central | 5,933 | 1,303 | 1,019 | 390 | 2,495 | 726 |
| 10 | Southwest | 4,189 | 597 | 461 | – | 2,577 | 554 |
| 11 | Southern | 6,095 | 570 | 534 | 733 | 4,014 | 244 |
| 12 | Gulf Coast | 5,173 | 488 | 1,979 | 1,935 | 200 | 570 |
|  | State | 57,323 | 6,752 | 17,045 | 6,909 | 19,916 | 6,702 |

NOTE: Districts may not add up to State totals because of rounding.

Table 14

SUPPLY OF NATURAL ENVIRONMENT AND RESERVOIR
RECREATIONAL AREAS
(ACRES)
1968

|  |  |  | Reservoir |  |  |
|---|---|---|---|---|---|
| District Number | Name of District | Natural Environment Area | Total Area | Dam and Lake Area | Recreation and Service Land Area |
| 1 | Great Lakes | 182,092 | 261,945 | 81,940 | 179,905 |
| 2 | North Appalachia | 8,697 | 6,771 | 6,370 | 401 |
| 3 | North Delta | 123,070 | – | – | – |
| 4 | Central Appalachia | 40,191 | – | – | – |
| 5 | South Delta | 221,087 | – | – | – |
| 6 | Central | 377,363 | – | – | – |
| 7 | South Appalachia | 380,383 | – | – | – |
| 8 | West Central | 41,320 | 48,000 | 36,000 | 12,000 |
| 9 | East Central | 401,556 | 10,950 | 3,800 | 7,150 |
| 10 | Southwest | 503,176 | – | – | – |
| 11 | Southern | 459,366 | – | – | – |
| 12 | Gulf Coast | 517,409 | – | – | – |
|  | State | 3,255,710 | 327,666 | 128,110 | 199,456 |

Table 15

## SUPPLY OF PUBLIC RECREATION ACRES BY DISTRICT

| District | Total Acres | Acres in Recreation | Percent of Total Acres in Recreation | Acres in Public Recreation | Percent of Total Acres in Public Recreation | Percent of Recreation Acres That are Public |
|---|---|---|---|---|---|---|
| 1 | 3,033,600 | 451,029 | 14.9 | 408,728 | 13.5 | 90.5 |
| 2 | 1,112,320 | 21,357 | 1.9 | 17,937 | 1.6 | 84.0 |
| 3 | 1,333,760 | 124,210 | 9.3 | 33,260 | 2.4 | 26.8 |
| 4 | 2,044,160 | 46,465 | 2.3 | 40,548 | 2.0 | 87.3 |
| 5 | 2,303,360 | 224,360 | 9.7 | 89,416 | 3.9 | 39.9 |
| 6 | 1,994,880 | 379,536 | 19.0 | 19,236 | 1.0 | 5.1 |
| 7 | 2,246,400 | 383,788 | 17.1 | 205,171 | 9.1 | 53.5 |
| 8 | 3,703,040 | 96,108 | 2.6 | 77,765 | 2.1 | 80.9 |
| 9 | 3,743,360 | 418,439 | 11.2 | 256,029 | 6.8 | 61.2 |
| 10 | 3,054,080 | 507,366 | 16.6 | 225,489 | 7.4 | 44.4 |
| 11 | 3,368,320 | 465,461 | 13.8 | 460,210 | 13.7 | 98.9 |
| 12 | 2,285,440 | 522,582 | 22.9 | 512,549 | 22.4 | 98.1 |
| Total | 30,222,720 | 3,640,700 | 12.0 | 2,346,338 | 7.8 | 64.4 |

# CHAPTER 3
# REQUIREMENTS

# INTRODUCTION

This chapter is divided into four sections: 1) Demand Indicators, 2) Standards, 3) Needs, and 4) Problems. Each section helps to define recreational requirements for the State of Mississippi. The Demand Indicators section gives an economic profile of the State with detailed population and income data that are helpful in planning the types of recreation that should be provided in Mississippi. Recreation indicators from the Mississippi Recreation Survey (1967) attempt to present the recreation activity interests of Mississippi residents and their future interests by amount of participation.

The Standards presented in the second section of the chapter were derived specifically for Mississippi to have quality development of facilities and to preserve the environmental quality of the sites to be developed. The next section on Needs utilizes the standards and projected participation increases to quantify specific area and facility requirements which are presented in charts. General and specific needs are given for the State and for each district. Finally, the Problems section defines specific areas that require attention if Mississippi is to upgrade her recreational environment in the future.

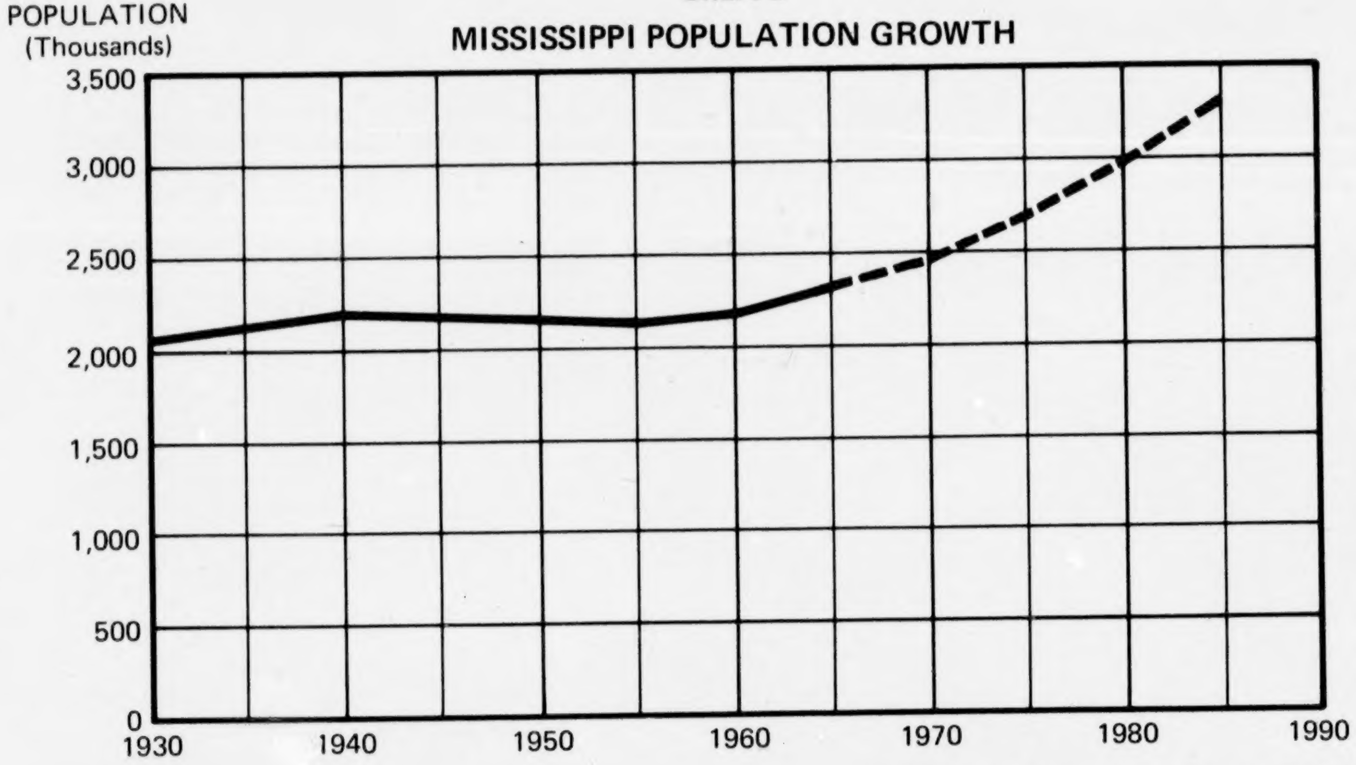
## DEMAND INDICATORS

This section presents data about Mississippi's population, economy, and recreation participation, which are indicators of demand for outdoor recreation facilities. The characteristics of Mississippi outlined in this section were considered in establishing standards and in quantifying future needs.

### *Population*

Mississippi's population was virtually stagnant from 1940 to 1960. Since 1960, population has been increasing at a rapid rate, and this trend is expected to continue.

**Chart 2**
**MISSISSIPPI POPULATION GROWTH**



Mississippi Research and Development Center

SOURCE: U. S. Department of Commerce, Bureau of the Census, *Census of Population,* 1960.
Ellen Bryant, Mississippi State University, *Mississippi County Population Estimates by Race and Age,* 1966.
Ellen Bryant and George Wilbur, *Illustrative Projections of Mississippi Population 1960–1985.*

Table 16

POPULATION PROJECTIONS BY RECREATION PLANNING DISTRICT

| District Number | Name of District | 1960 Number | 1960 % of Total | 1966 Number | 1966 % of Total | 1970 Number | 1970 % of Total | 1975 Number | 1975 % of Total | 1980 Number | 1980 % of Total | 1985 Number | 1985 % of Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Great Lakes | 171,253 | 7.9 | 192,160 | 8.2 | 204,263 | 8.3 | 288,104 | 8.5 | 251,727 | 8.5 | 281,129 | 8.5 |
| 2 | North Appalachia | 72,213 | 3.3 | 79,970 | 3.4 | 83,674 | 3.4 | 93,925 | 3.5 | 106,614 | 3.6 | 122,374 | 3.7 |
| 3 | North Delta | 108,138 | 5.0 | 111,060 | 4.7 | 113,205 | 4.6 | 118,077 | 4.4 | 127,344 | 4.3 | 138,911 | 4.2 |
| 4 | North Central Appalachia | 142,649 | 6.6 | 156,950 | 6.7 | 164,887 | 6.7 | 182,483 | 6.8 | 201,382 | 6.8 | 224,903 | 6.8 |
| 5 | South Delta | 212,259 | 9.8 | 218,800 | 9.3 | 221,489 | 9.0 | 230,787 | 8.6 | 245,804 | 8.3 | 271,207 | 8.2 |
| 6 | North Central | 120,070 | 5.5 | 131,090 | 5.6 | 137,816 | 5.6 | 152,963 | 5.7 | 165,844 | 5.6 | 181,907 | 5.5 |
| 7 | South Appalachia | 146,822 | 6.7 | 159,020 | 6.7 | 164,887 | 6.7 | 179,799 | 6.7 | 201,382 | 6.8 | 228,210 | 6.9 |
| 8 | West Central | 386,480 | 17.7 | 417,780 | 17.7 | 435,595 | 17.7 | 474,992 | 17.7 | 527,148 | 17.8 | 592,024 | 17.9 |
| 9 | East Central | 207,392 | 9.5 | 219,700 | 9.3 | 223,950 | 9.1 | 238,838 | 8.9 | 263,573 | 8.9 | 291,051 | 8.8 |
| 10 | Southwest | 171,515 | 7.9 | 173,150 | 7.3 | 174,731 | 7.1 | 185,166 | 6.9 | 198,420 | 6.7 | 214,981 | 6.5 |
| 11 | Southern | 209,778 | 9.6 | 222,930 | 9.4 | 228,872 | 9.3 | 249,572 | 9.3 | 272,458 | 9.2 | 300,973 | 9.1 |
| 12 | Gulf Coast | 229,572 | 10.5 | 275,170 | 11.7 | 307,624 | 12.5 | 348,864 | 13.0 | 399,802 | 13.5 | 459,728 | 13.9 |
|  | State Totals | 2,178,141 | 100.0 | 2,357,780 | 100.0 | 2,460,993 | 100.0 | 2,683,570 | 100.0 | 2,961,498 | 100.0 | 3,307,398 | 100.0 |

SOURCE: U. S. Department of Commerce, Bureau of the Census, *Census of Population,* 1960.

Ellen Bryant, Mississippi State University, *Mississippi County Population Estimates by Race and Age, 1966.*

Ellen Bryant and George Wilber, Mississippi State University, *Illustrative Projections of Mississippi Population, 1960–1985* (for State totals 1970–1985).

Mississippi Research and Development Center.

Mississippi's population is rapidly becoming more urbanized, but the State is still predominantly rural. This statement has two important implications for recreation development:

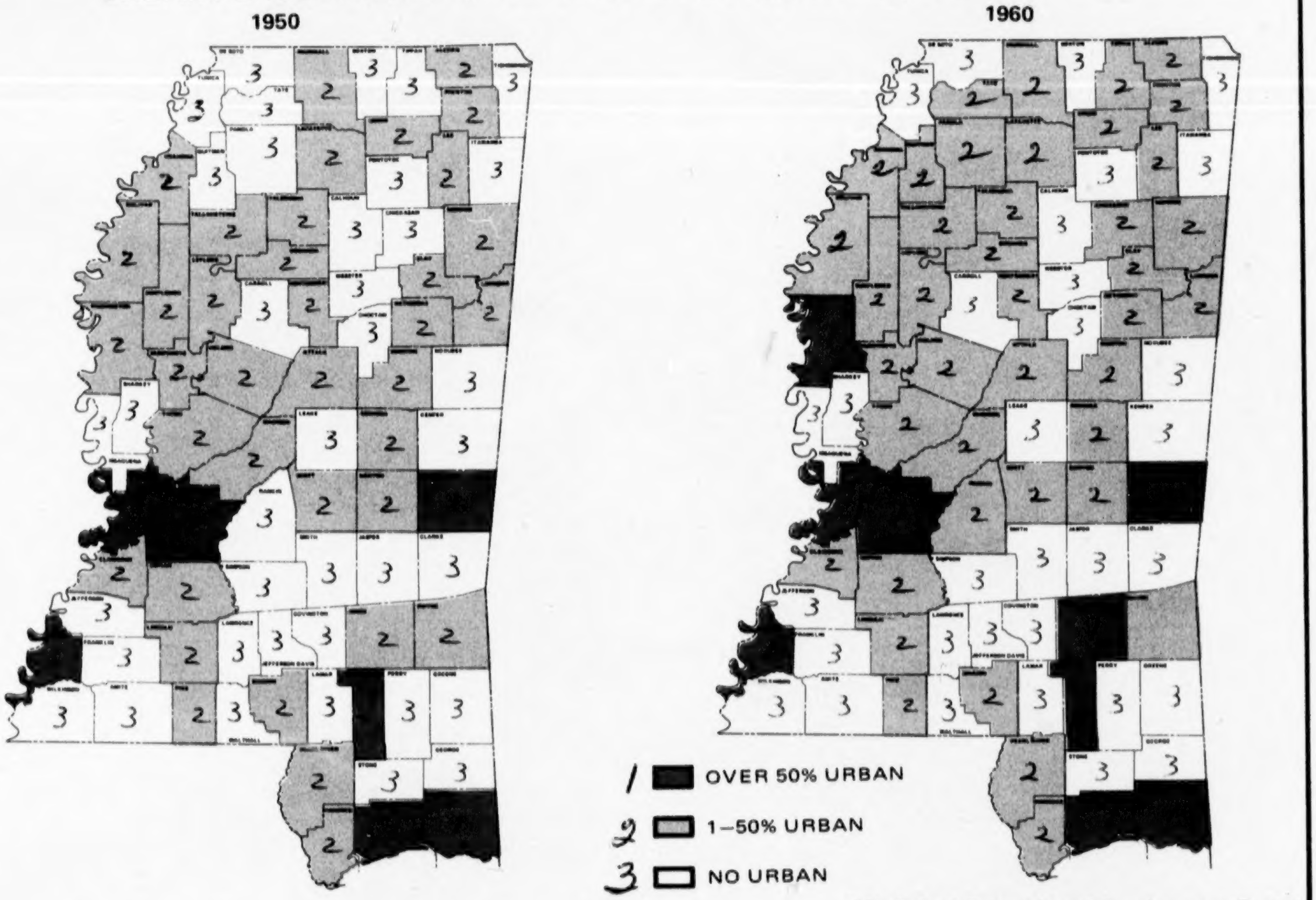
1. Present participation patterns show a predominance of such activities as hunting, fishing, and picnicking.
2. Plans for the future must consider activities which are increasing with the rapid urbanization of the State – camping, hiking, boating, and participating in outdoor games.

Mississippi has a distinctively young population with a larger percentage of people in the under 15 age groups than the U. S. average, and fewer people in the over 15 age groups. In 1960, the median age of Mississippi's population was 24.2 and the United States median age was 29.5.

Nonwhites number about four out of ten persons in Mississippi. The composition varies in sections of the State from about seven out of ten in many Delta counties to two out of ten in the northeastern and southeastern tips of the State.

**Map 25**

**URBAN PERCENTAGES OF POPULATION BY COUNTIES, 1950 AND 1960**



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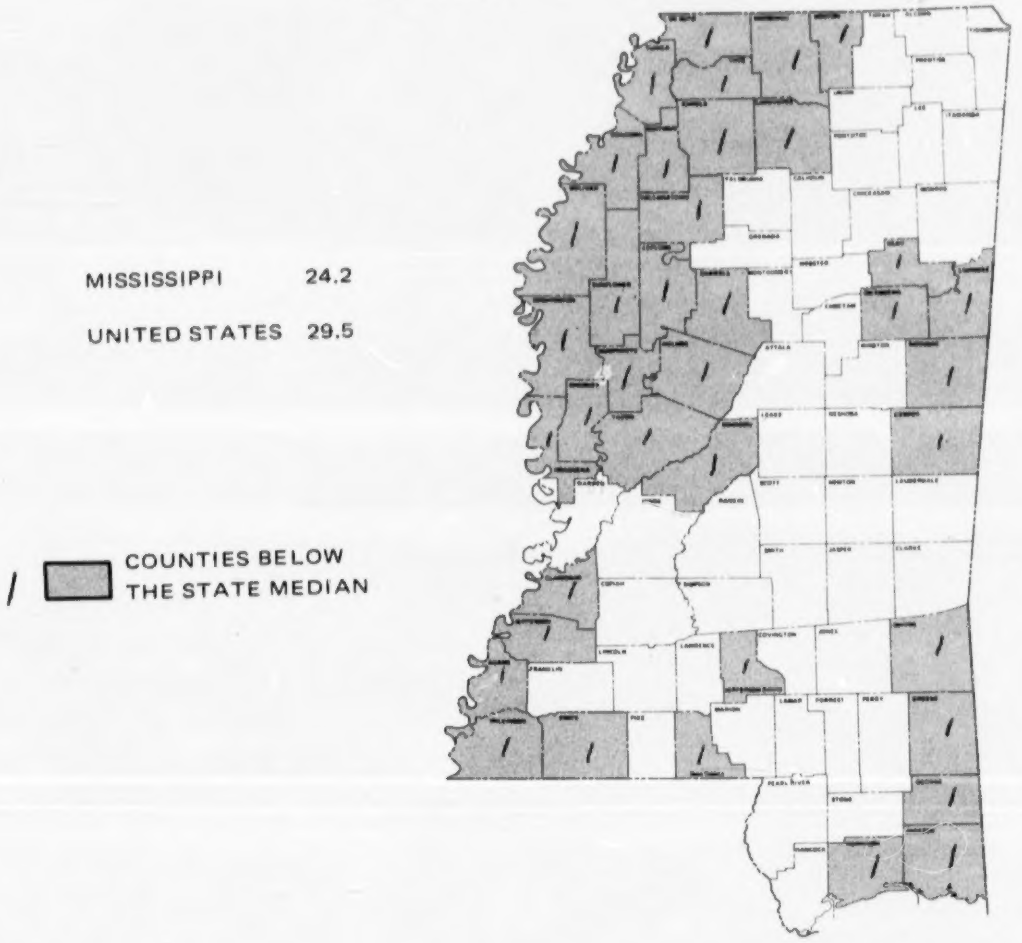
SOURCE: U. S. Department of Commerce, Bureau of the Census, *Census of Population, 1950, 1960.* (Census definition of urban population is that population living in a town of 2,500 or more. In 1960 the definition included unincorporated towns.)

## Map 26

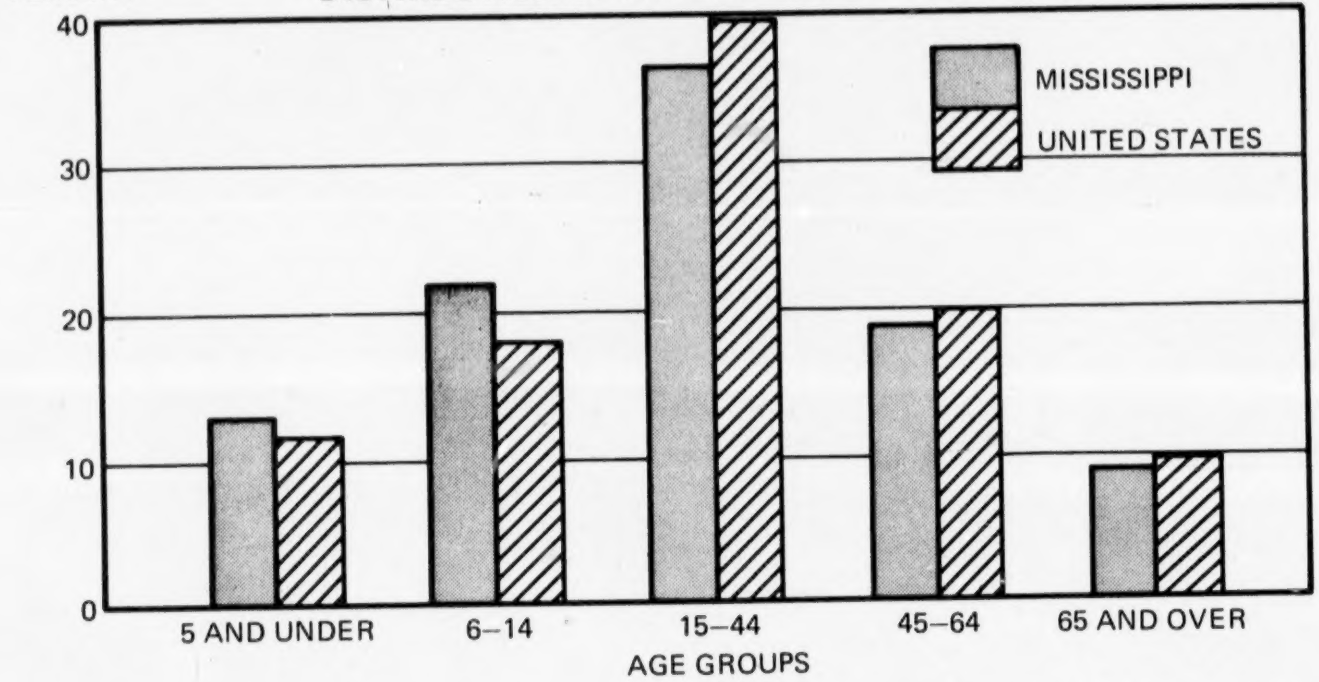
## MEDIAN AGE – 1960



Mississippi Research and Development Center

SOURCE: U. S. Department of Commerce, Bureau of the Census, *Census of Population 1960.*

## Chart 3
## DISTRIBUTION OF POPULATION BY AGE GROUP

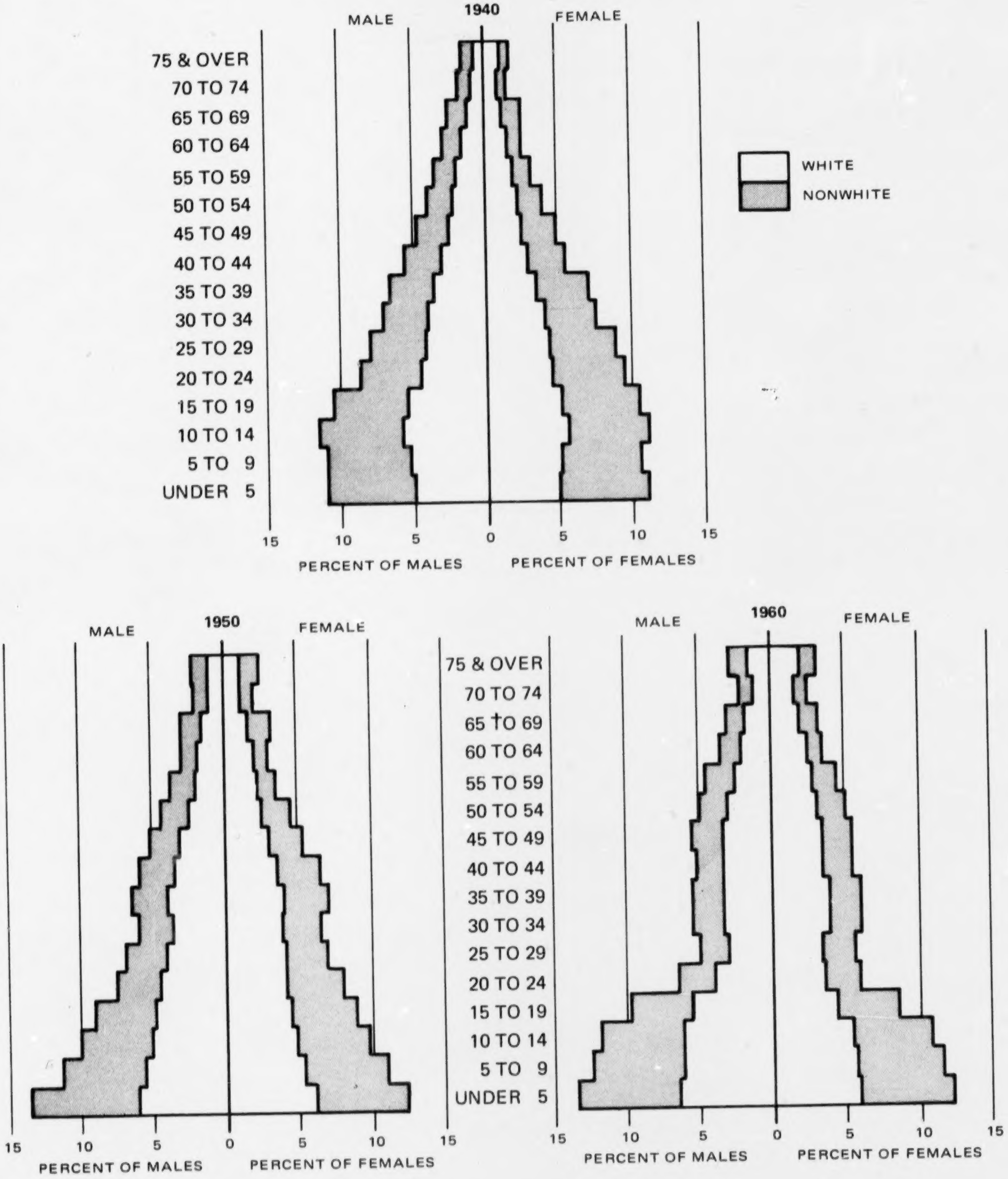


Mississippi Research and Development Center

SOURCE: Ellen Bryant, Mississippi State University, *Mississippi County Population Estimates by Race and Age, 1966.*
U. S. Department of Commerce, Bureau of the Census, *Current Population Reports,* Series P–25, No. 385.

## Chart 4

## POPULATION PYRAMIDS BY AGE, SEX, AND RACE FOR MISSISSIPPI, 1940, 1950, AND 1960

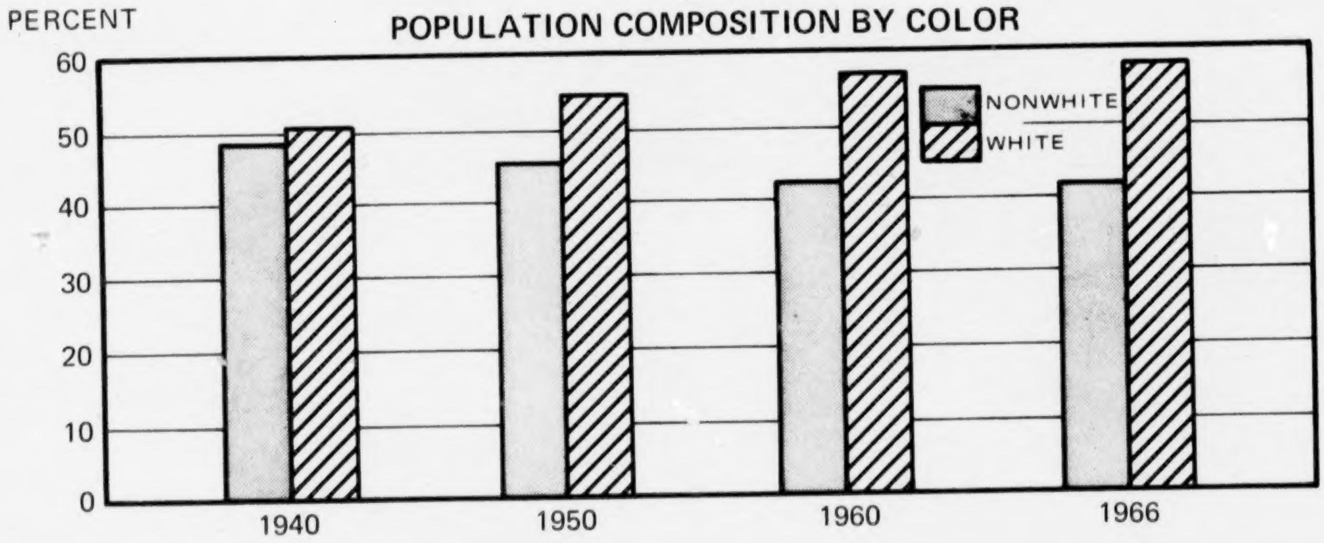


Mississippi Research and Development Center

SOURCE: U. S. Department of Commerce, Bureau of the Census, *Census of Population 1940, 1950, 1960.*

## Chart 5

## POPULATION COMPOSITION BY COLOR

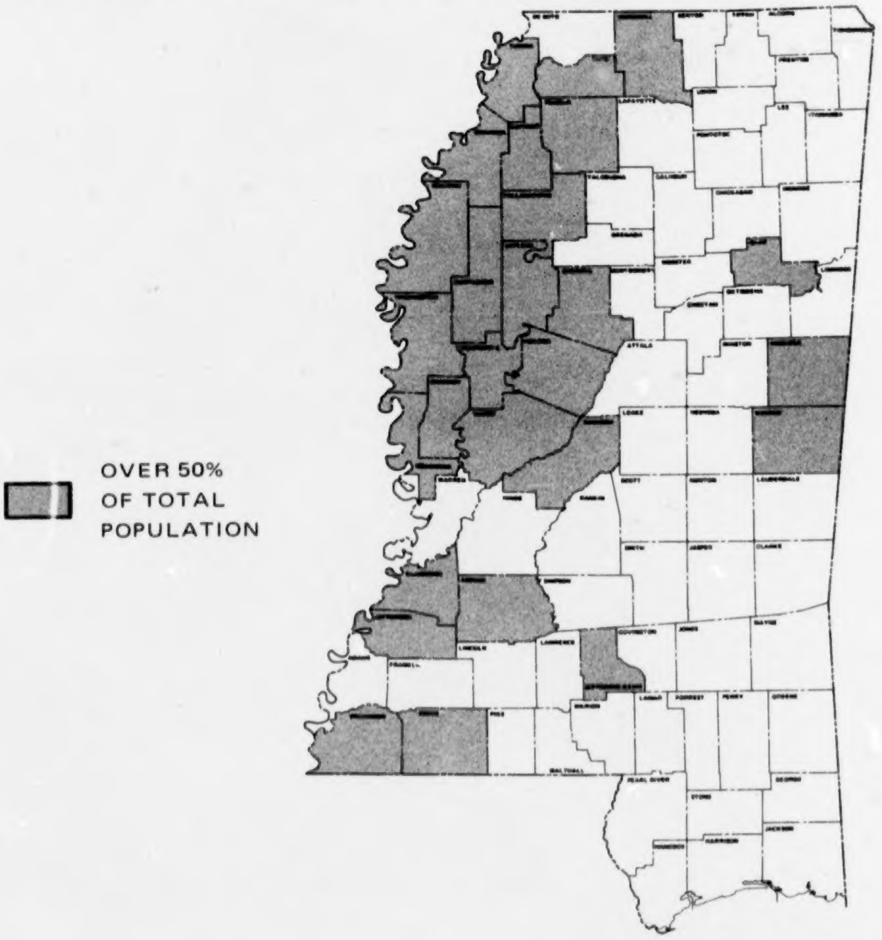


Mississippi Research and Development Center

SOURCE: U. S. Department of Commerce, Bureau of the Census, *Census of Population, 1940, 1950, 1960.*
Ellen Bryant, Mississippi State University, *Mississippi County Population Estimates by Race and Age, 1966.*

Map 27

PERCENTAGE NONWHITE POPULATION, 1966



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SOURCE: Ellen Bryant, Mississippi State University, *Mississippi County Population Estimates by Race and Age, 1966.*

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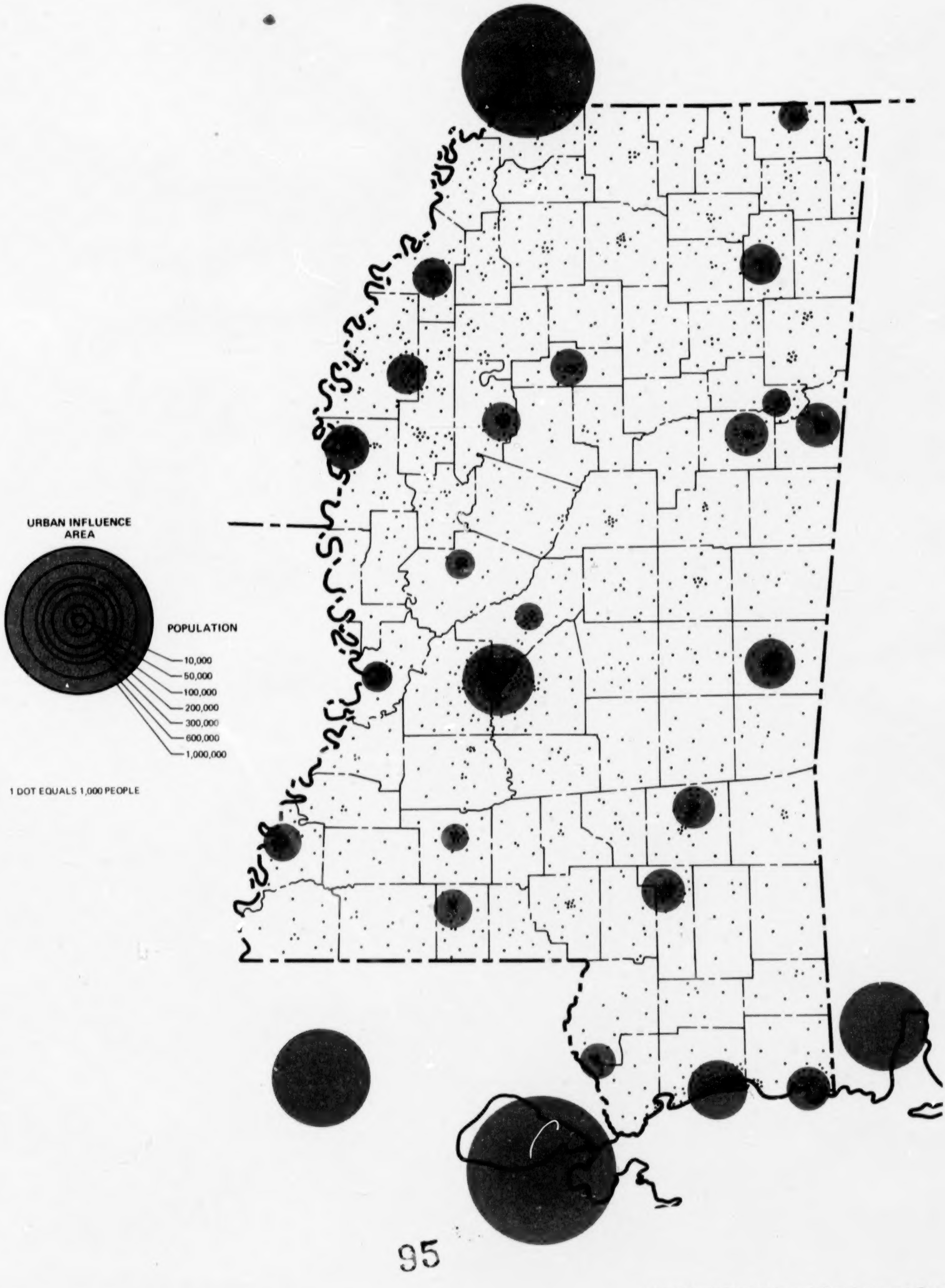
## Map 28
## POPULATION DENSITY OF MISSISSIPPI – 1965



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*Economy*

In the past, Mississippi's economic and social structure has been heavily oriented toward agriculture, which in turn relied on large numbers of low-wage farm laborers. With mechanization, improved farming techniques, and acreage limitations, the unskilled farm labor was displaced with no alternative sources of employment. As a result, there was mass migration from the State until about 1960 when changes started taking place in Mississippi's economy. There is a definite trend, already well established, toward economic and cultural standards that provide an improved urban civilization and a better standard of living for all Mississippians.

Although the State is experiencing a fast rate of growth, in actual comparison with other states, Mississippi still has a long way to go. Since 1950, and prior to that, Mississippi has ranked last among the states in per capita income. In 1967 Mississippi's per capita income of $1,896 was $1,263 below the United States average of $3,159 as reported by the United States Office of Business Economics. According to ORRRC Study Report 20, income has a significant influence on participation in outdoor recreation.

It is anticipated that Mississippi will start gaining income much faster than the United States, and the Mississippi Research and Development Center has set as a goal for the State income parity with the United States average by year 2000. The income increase, as anticipated, will bring along with it increased recreation participation in the State.

Table 17

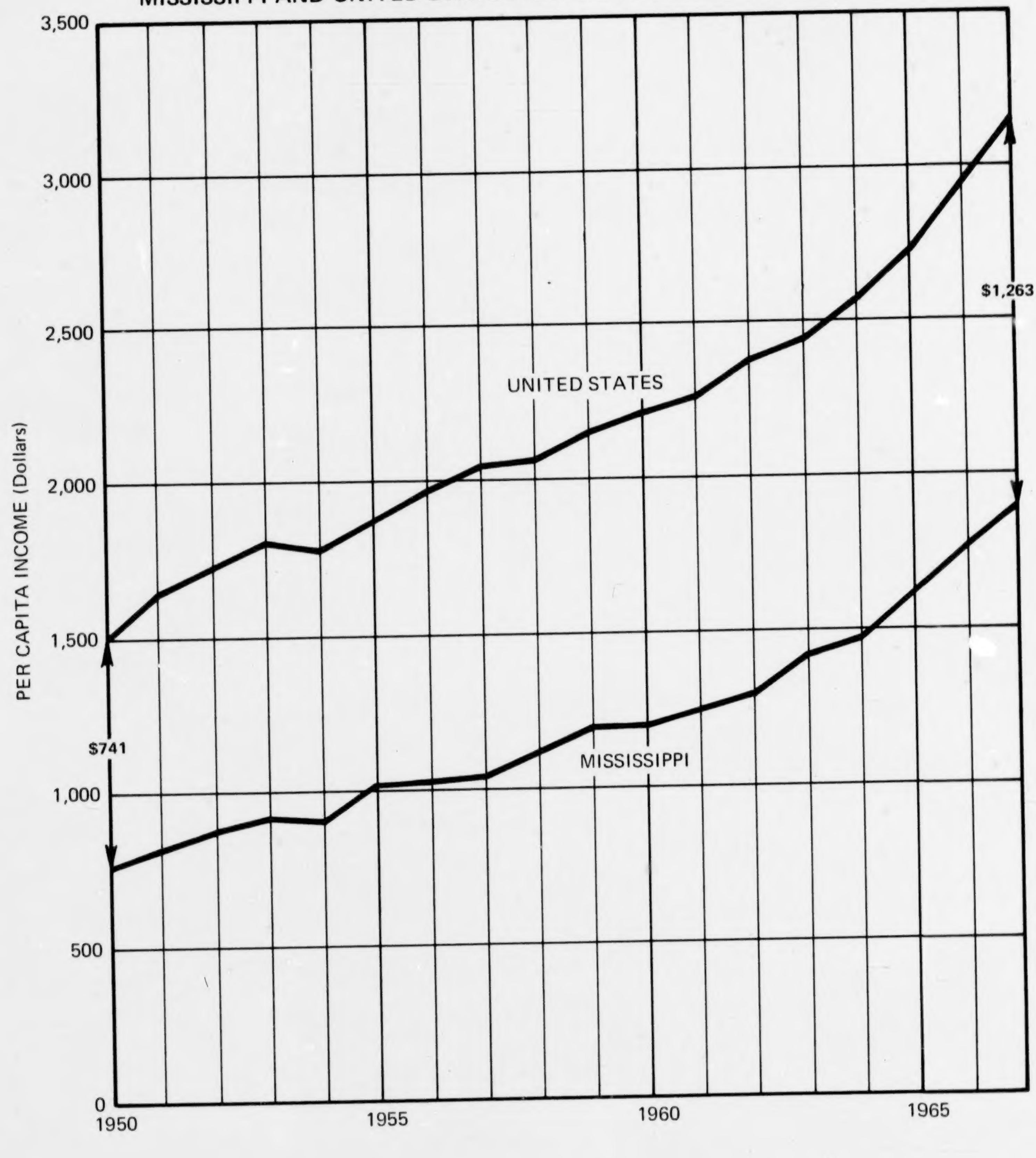
MISSISSIPPI'S PER CAPITA INCOME GOALS

| | Mississippi | United States | Difference |
|---|---|---|---|
| 1970 | $2,200 | $3,350 | $1,150 |
| 1975 | 2,900 | 3,930 | 1,030 |
| 1980 | 3,700 | 4,580 | 880 |
| 1985 | 4,600 | 5,160 | 560 |
| 1990 | 5,550 | 5,800 | 250 |
| 1995 | 6,300 | 6,400 | 100 |
| 2000 | 7,000 | 7,000 | – |

SOURCE: Mississippi Research and Development Center.

## Chart 6

## MISSISSIPPI AND UNITED STATES PER CAPITA INCOME TREND, 1950–1967



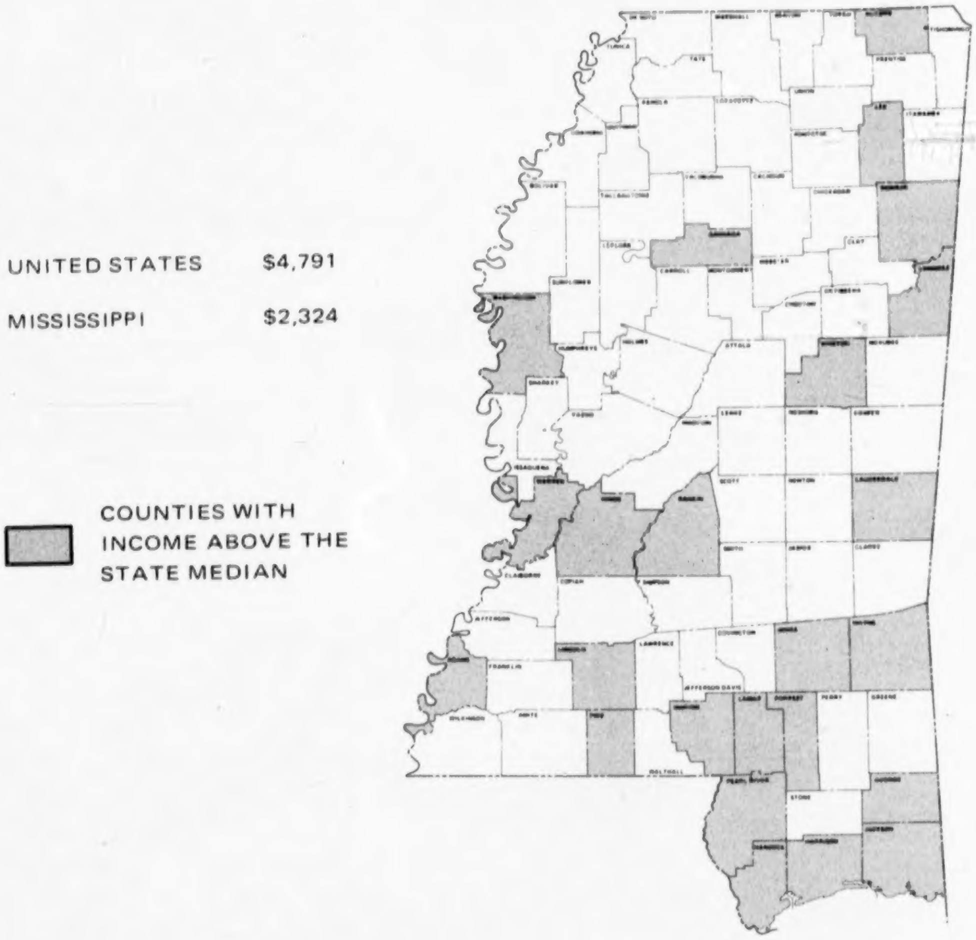
Mississippi Research and Development Center

SOURCE: U. S. Department of Commerce, Office of Business Economics, *Survey of Current Business,* August, 1968.

Although no county in Mississippi had a median income for families and unrelated individuals in 1959 above the United States median ($4,791), several areas of the State had much higher incomes than others. The Gulf Coast District, with median incomes ranging from $2,295 to $4,728, is in strong contrast to the North Central or North Delta Districts in which every county was below the State median of $2,324.

## Map 29

## MEDIAN FAMILY INCOME 1959
(Families and Unrelated Individuals)



Mississippi Research and Development Center

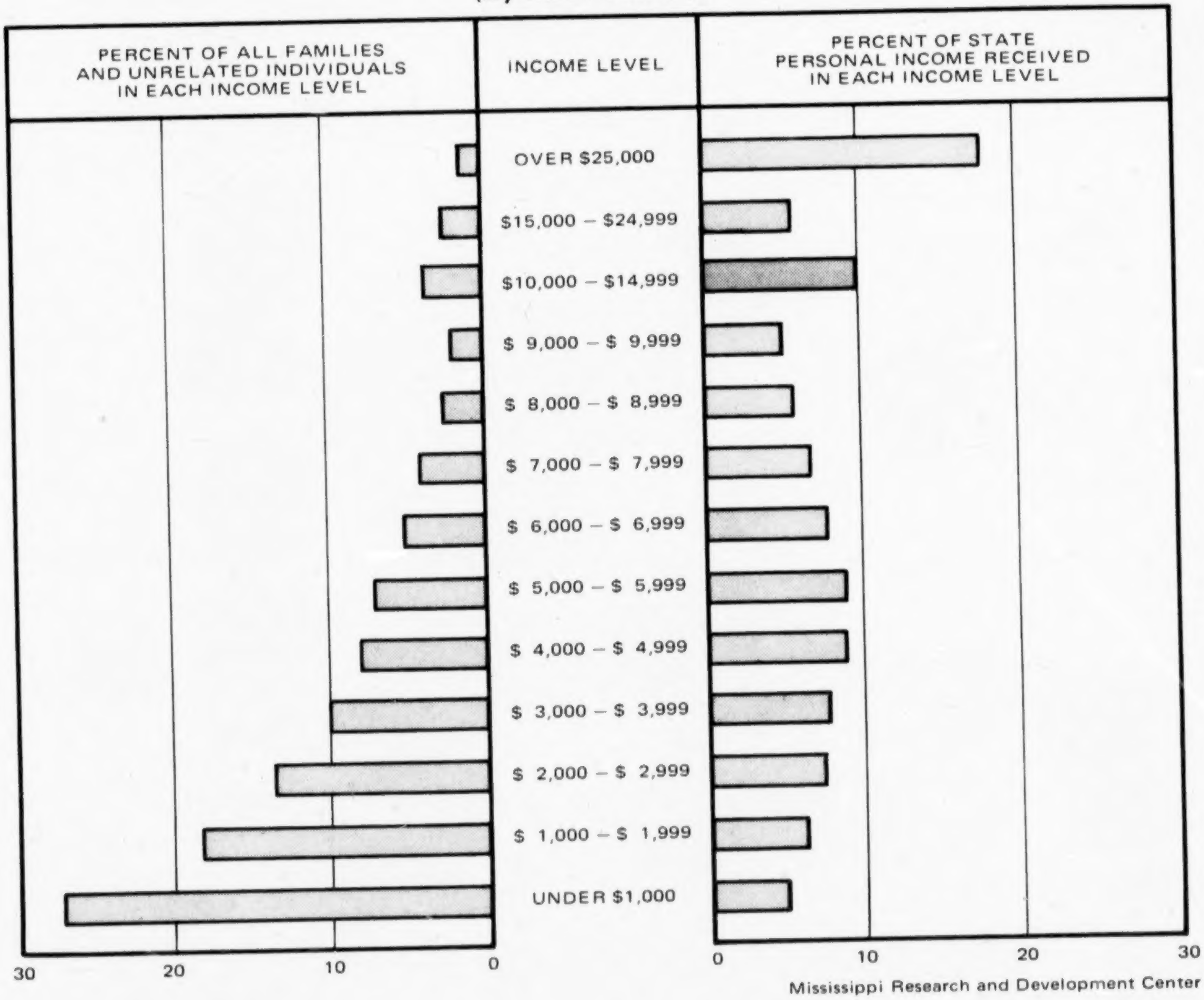
SOURCE: U. S. Department of Commerce, Bureau of the Census, *Census of Population, 1960.*

The income is also very unevenly distributed, with over 50% of the families and unrelated individuals earning less than $3,000 a year in 1959 and almost one-fourth of the income being earned by less than one-tenth of the families and unrelated individuals.

**Chart 7**

**DISTRIBUTION OF MISSISSIPPI INCOME – 1959**

**(By Income Level)**

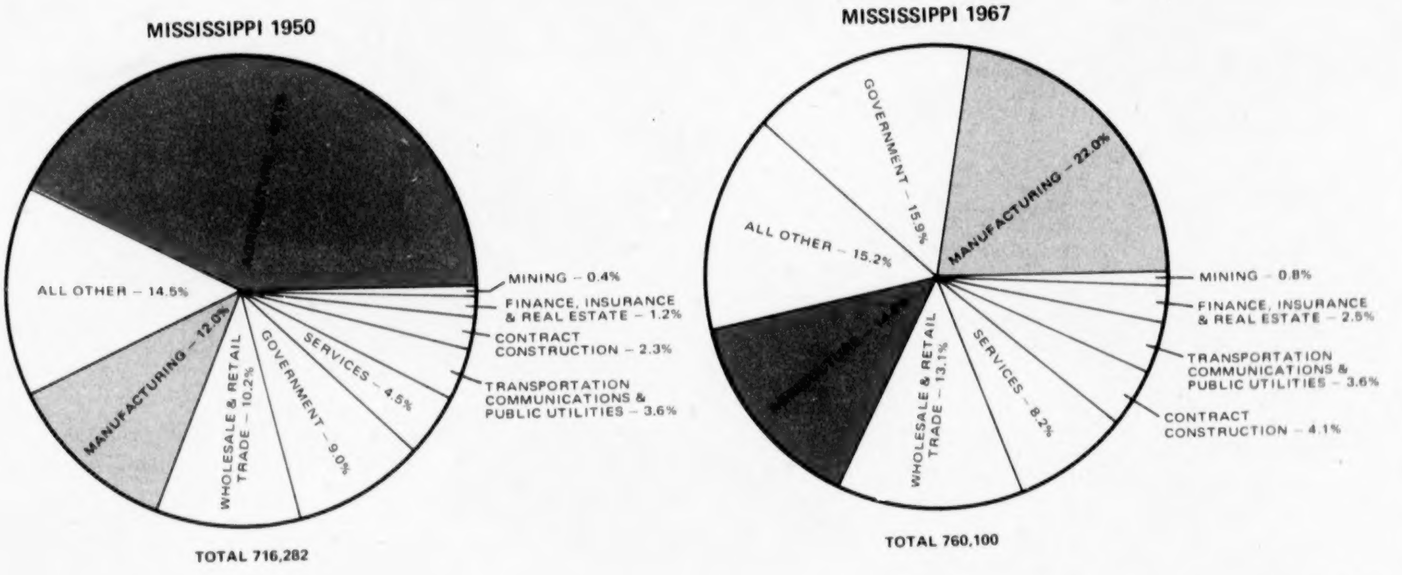


SOURCE: U. S. Department of Commerce, Bureau of the Census, *Census of Population 1960.*

In changing from an agriculturally dependent economy to a more diversified economy, the employment mix has changed accordingly. In 1950, over 40% of the employment was in agriculture and by 1967 agricultural employment had dropped to only 14.6% of the total. Many of the employees lost from agriculture were taken into manufacturing and government.

**Chart 8**

**MISSISSIPPI'S EMPLOYMENT DISTRIBUTION**



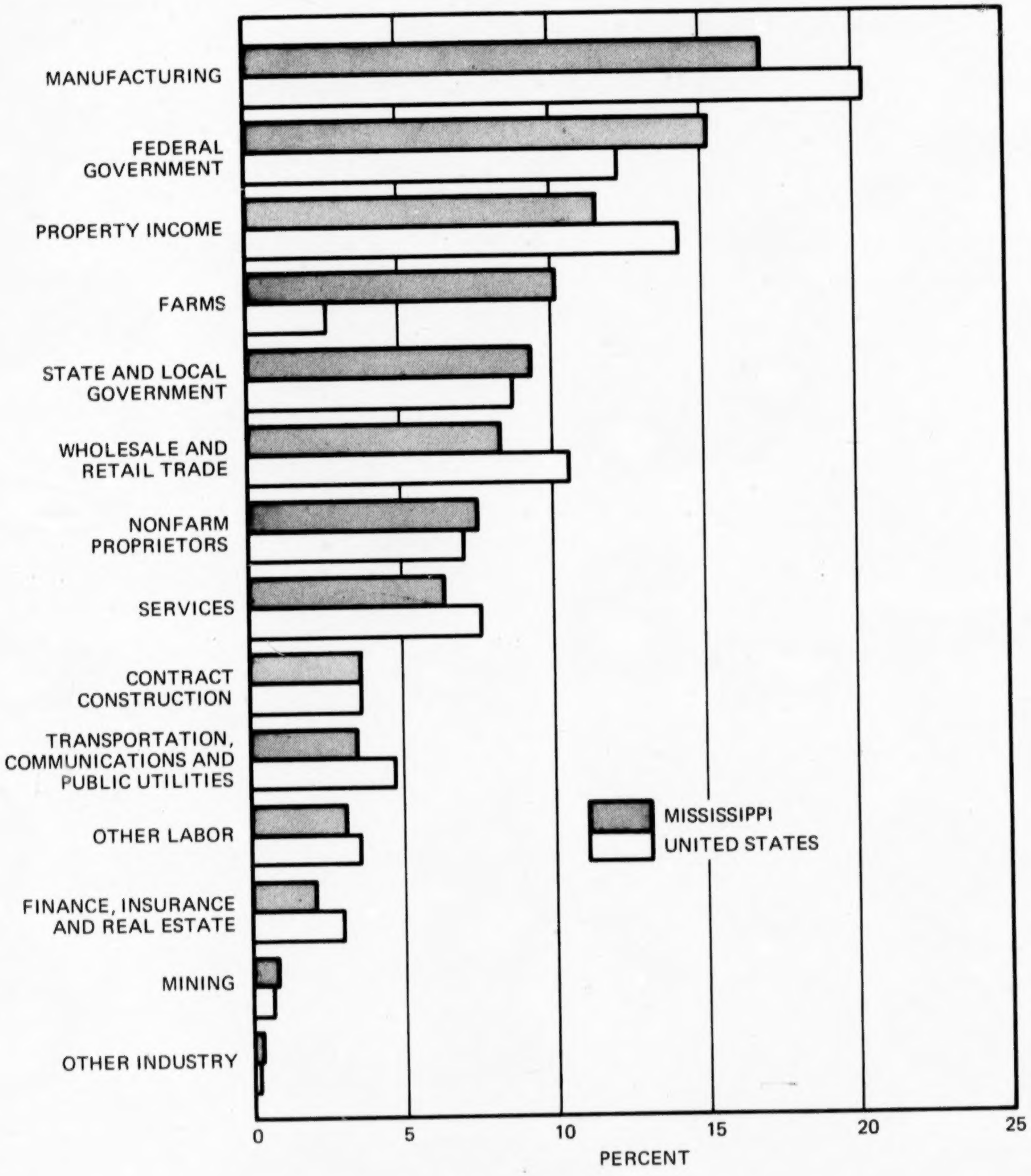
Mississippi Research and Development Center

SOURCE: U. S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings Statistics for States and Areas, 1939–67,* Bulletin No. 13785 (Washington: U. S. Government Printing Office, August, 1968).

Income sources show the same change, with income from manufacturing heading the list and farms fourth. Farms account for about three times as much income in Mississippi as in the United States, but this is in keeping with the fact that Mississippi has an abundance of rich land suitable for farming.

## Chart 9

## PERSONAL INCOME BY SOURCE MISSISSIPPI AND THE UNITED STATES, 1967



Mississippi Research and Development Center

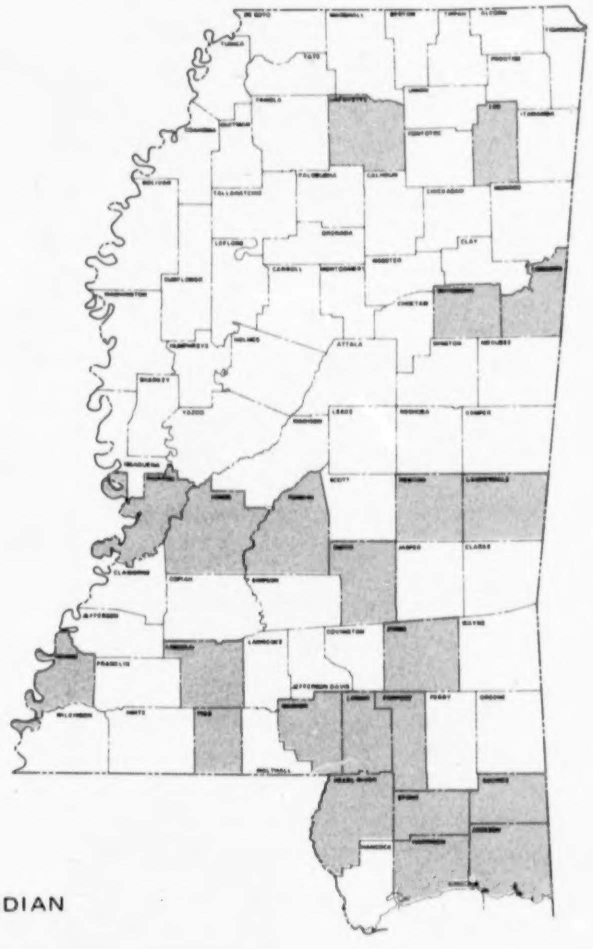
SOURCE: "Personal Income by States and Regions in 1967," *Survey of Current Business* Vol. 48, No. 8 (August, 1968). Computed from Tables 4, 43 and 63.

Outdoor recreation planning must take into account the present low income level of the State; yet, it must prepare for increased urbanization and transformation from an agriculturally dominant economy to one in which manufacturing, government, trade, and services all have significant roles.

The educational level of Mississippians is low overall as shown in the 1960 Census. There is again a big disparity among the districts, with four of them having no counties with median school years completed above the State median.

### Map 30

### MEDIAN SCHOOL YEARS COMPLETED
(Persons 25 Years and Over)



| | MISSISSIPPI | UNITED STATES |
|---|---|---|
| TOTAL | 8.9 | 10.6 |
| WHITE | 11.0 | 10.9 |
| NONWHITE | 6.0 | 8.2 |

▨ COUNTIES WITH SCHOOL YEARS COMPLETED ABOVE THE STATE MEDIAN

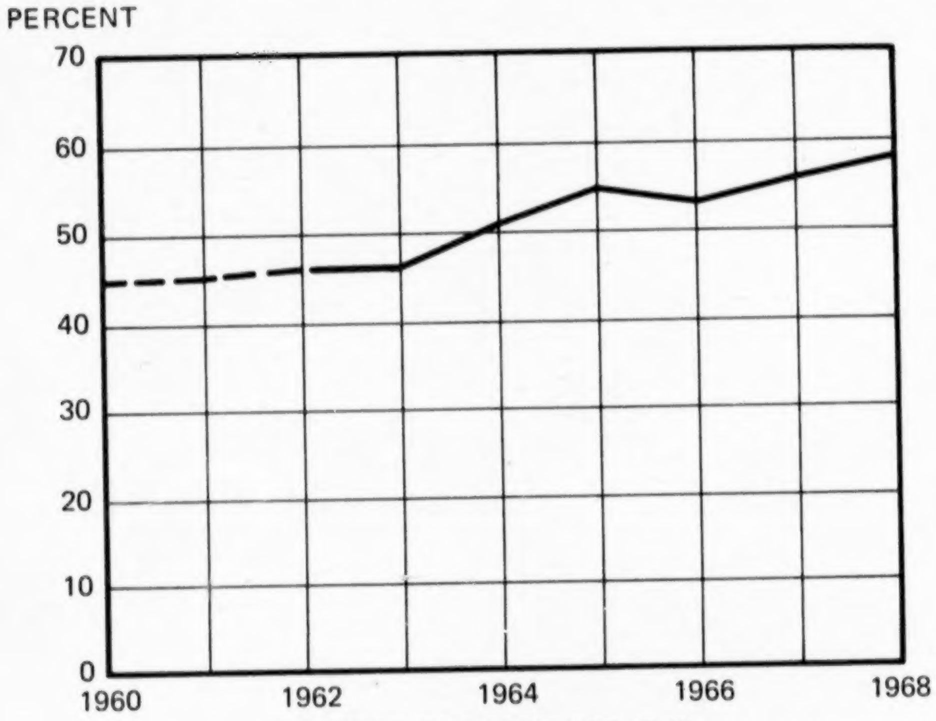
Mississippi Research and Development Center

SOURCE: U. S. Department of Commerce, Bureau of the Census, *Census of Population, 1960.*

However, the level of education is rising as more high school graduates enter college and more students complete the twelfth grade.

### Chart 10

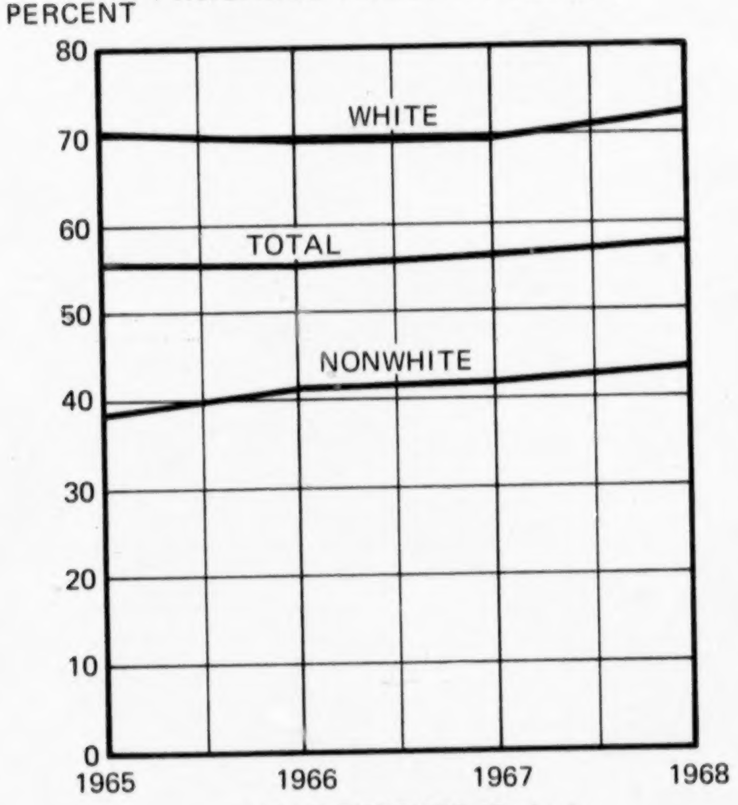
### PERCENTAGE HIGH SCHOOL GRADUATES ENTERING COLLEGE



YEAR OF ENTRANCE (Fall)
INFORMATION NOT AVAILABLE FOR 1961

### Chart 11

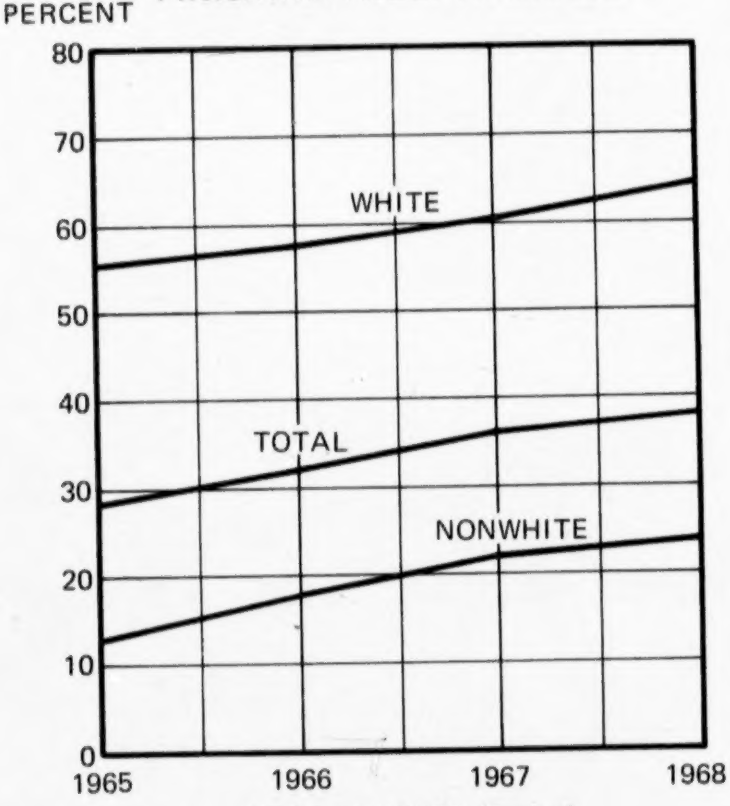
### PERCENTAGE FIFTH GRADE FINISHING TWELFTH GRADE



YEAR FINISHED (Spring)

### Chart 12

### PERCENTAGE FIRST GRADE FINISHING TWELFTH GRADE



YEAR FINISHED (Spring)

SOURCE: Mississippi State Department of Education, Division of Administration and Finance, *Statistical Data.*

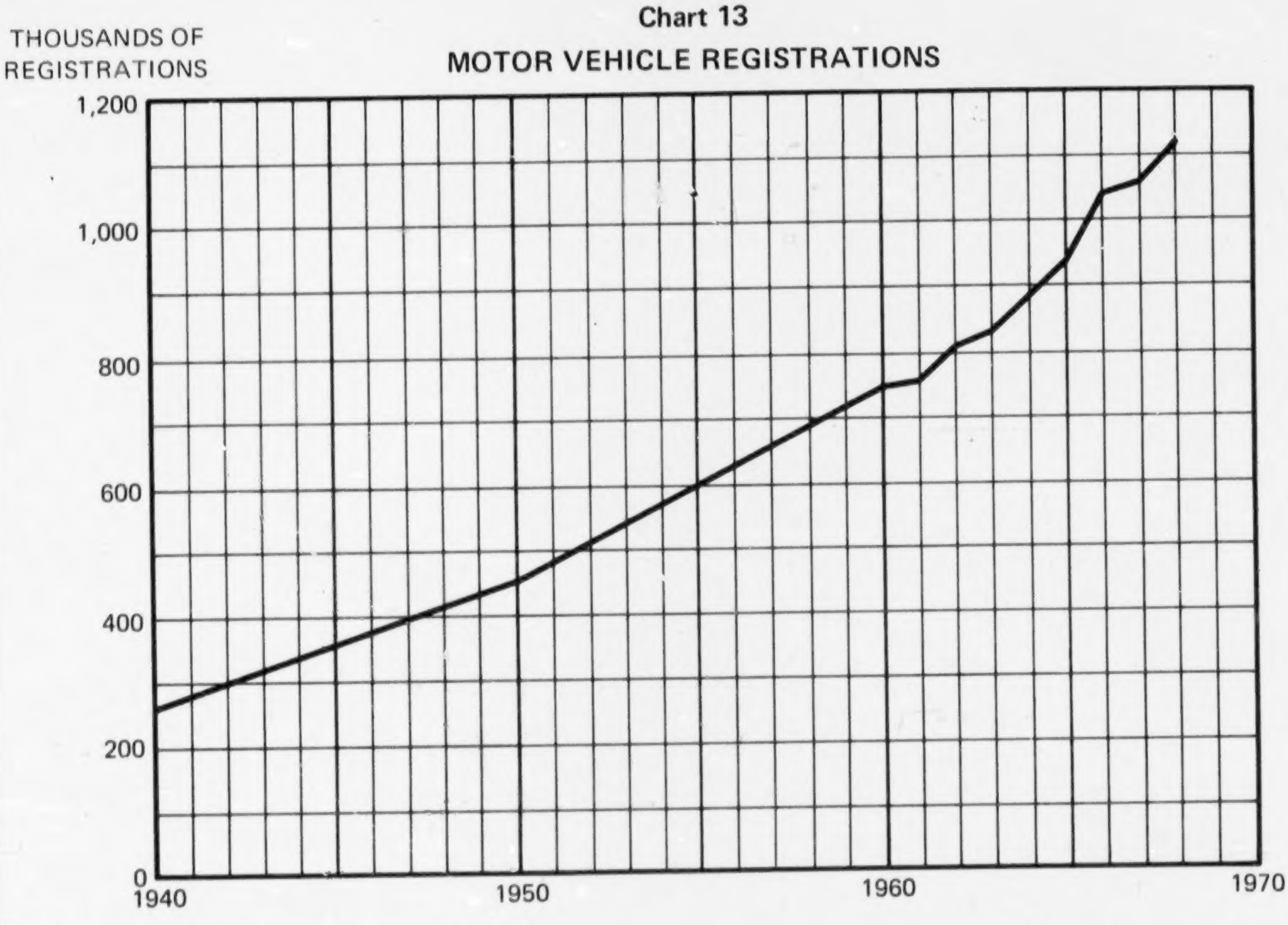
In a growing economy, outdoor recreation has an impact on the total picture; people like to live in a place that offers good recreational facilities. This Recreation Plan is part of the total environment plan to make Mississippi a place where people will want to locate and stay.

*Recreation Trends*

Mississippians will be experiencing the same general trends toward a shorter work week, longer paid vacations, and more holidays as the Nation. This increase in leisure time will give people more time for outdoor recreation.

In addition, the population is becoming more mobile, further increasing the demand for outdoor recreation facilities. More motor vehicles (Chart 13) and a larger volume of traffic flow (Map 7) indicate the increasing mobility.

**Chart 13**
**MOTOR VEHICLE REGISTRATIONS**



SOURCE: Mississippi Motor Vehicle Comptroller.

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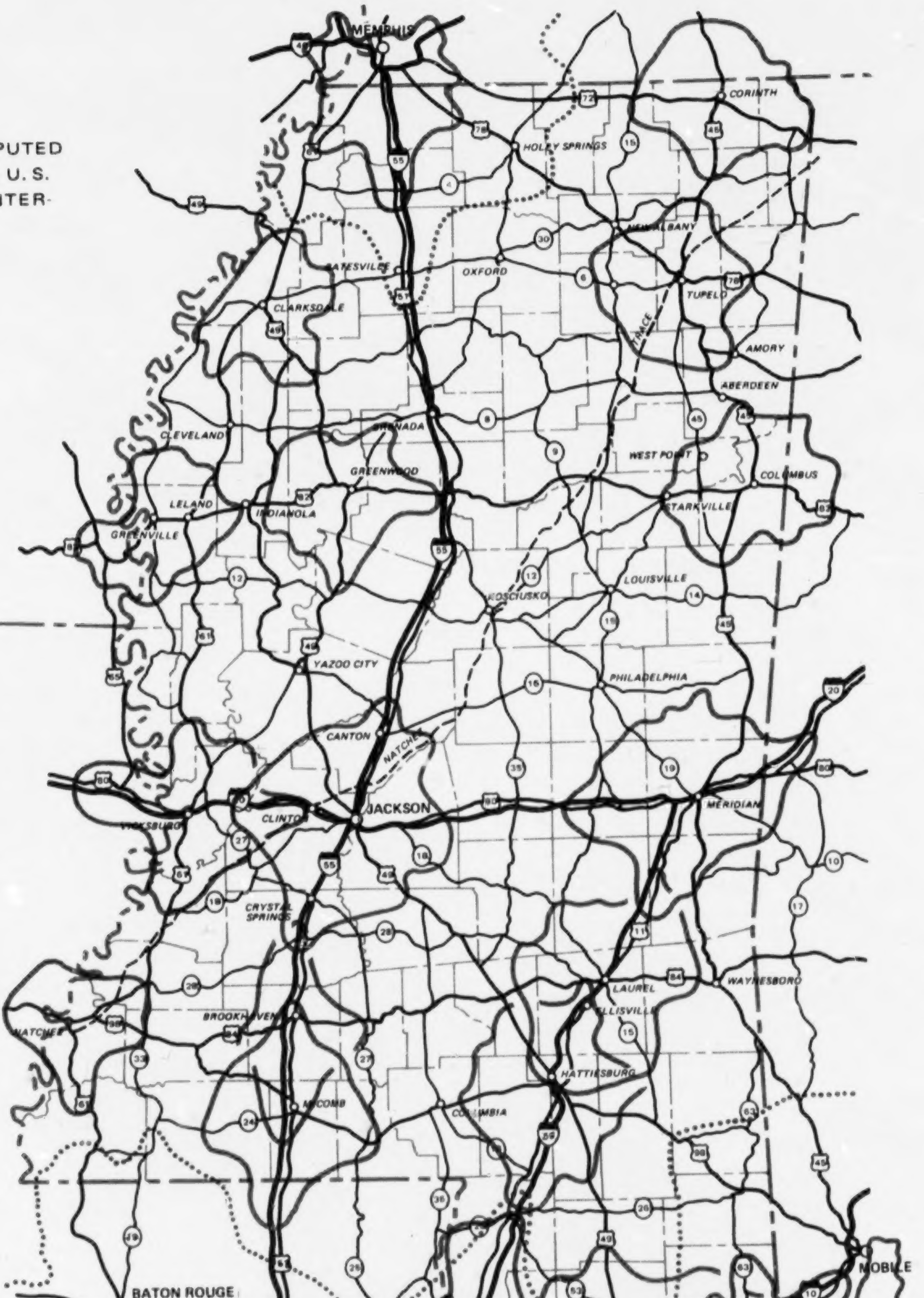
Completion of the interstate highways in Mississippi and the State's own highway improvement program will also contribute to mobility. Map 31 shows access areas around main cities afforded by the existing highway system in Mississippi.

## Map 31

## ACCESS AREAS AROUND MAIN CITIES

TRAVELING DISTANCES COMPUTED USING 45 MPH ON STATE AND U. S. HIGHWAYS AND 60 MPH ON INTERSTATE.



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Much of the foreseeable demand for recreation participation will be nonresident demand, the full impact of which can only be estimated. A quantitative analysis would be only conjecture. Also, reliable data on nonresident participation in outdoor recreation is not in sufficient quantity or quality to forecast. Therefore, nonresident demand has not been included in the projected data for outdoor recreation participation. There are several studies, however, that provide some insight into the out-of-state visitation to Mississippi and from this data the projected number of out-of-state visits to Mississippi, both total and pleasure visits, are presented on the following page.

In a study by Lewis Copeland,[1] it was estimated that in 1967, 17.6 million persons from out-of-state visited in Mississippi for business or pleasure. These visitors spent a total of $160 million in the State, which is an increase of 7% over 1966 and 142% over 1954. They contributed $54 million to Mississippi personal income and $17 million to Mississippi State government revenue.

Out-of-state visitation to Mississippi is especially heavy in two recreation districts – Great Lakes and Gulf Coast.

Out-of-state travelers generated 2.5 billion passenger miles during their visits in or through Mississippi. This visitor traffic accounted for a fifth of the 12 billion passenger miles traveled by all persons in the State.

According to Copeland, about 3% of the people in Mississippi are from out-of-state on the average day. (Based on the 1966 estimate of population, this would approximate 72,921 out-of-state visitors per day.)

In 1964, according to Stanford Research Institute,[2] there were approximately 15 million visits to Mississippi from out-of-state, averaging 1.45 days in length. Of these visits, 3.2 million were pleasure visits. Pleasure visitors are the ones which determine out-of-state demand for outdoor recreational facilities; therefore, it became necessary to compute the number of pleasure visits to Mississippi for the projection years. First, the total number of visits to Mississippi was computed per day for each recreation planning district, assuming that the percentage of persons in each district who are out-of-state visitors is uniform throughout the State. To derive the number of visits per year, it was assumed that the average length of visits was 1.45 days. This factor was applied to the number of visitors in each district per day to derive the number of visitors per year.

To derive pleasure visitors, it was necessary to determine what percentage of visitors to the State visited the State for pleasure purposes. According to Stanford Research Institute, 21.33% of the visitors to Mississippi from out-of-state in 1964 came for pleasure. It is expected that this percentage will increase because of several factors.

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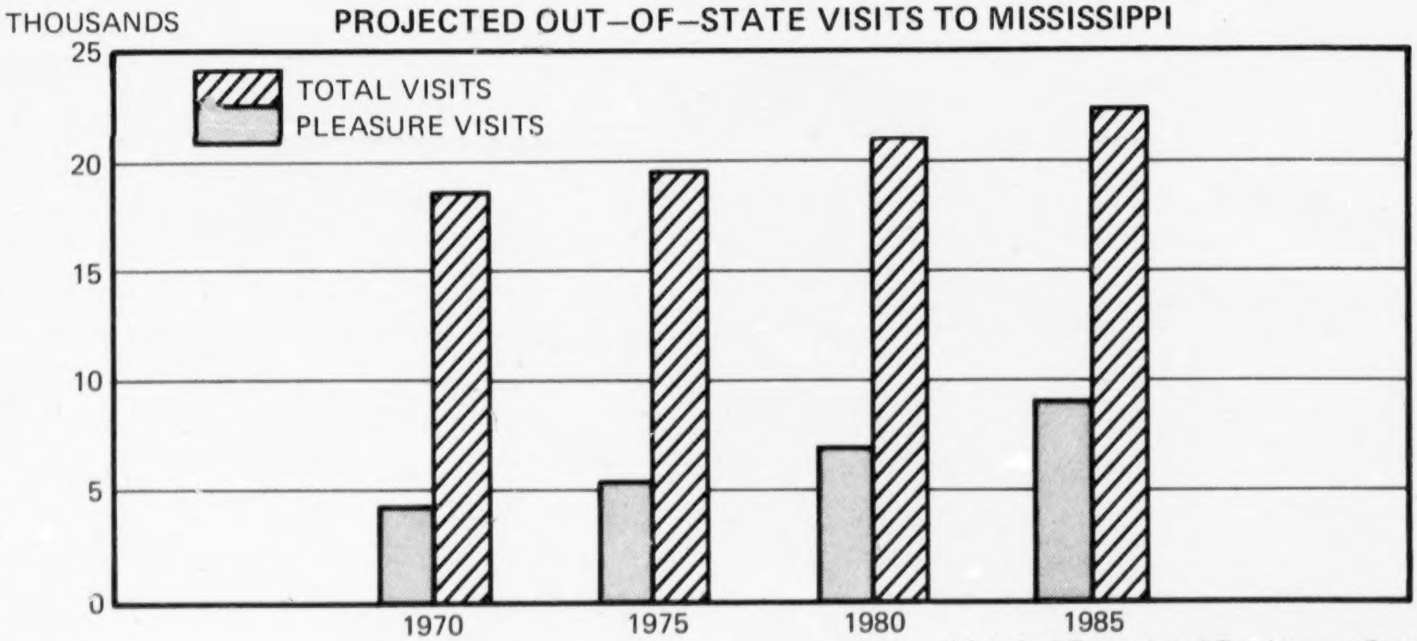
[1] Lewis C. Copeland, Department of Statistics, College of Business Administration, The University of Tennessee, *Travel in Mississippi During 1967; An Economic Analysis of Tourists and the Travel Service and Transport Business*, prepared for the Travel Department, Perry L. Nations, Manager, Mississippi Agricultural and Industrial Board, Jackson, March, 1968.

[2] L. J. Crampon and Paul W. DeGood, Southern California Laboratories of Stanford Research Institute, *Opportunities of Development of the Visitor Industry in Mississippi*, February, 1966.

As the amount of leisure time increases and as more recreation facilities become available, more persons should visit Mississippi for pleasure. Also, as the State increases its visitor promotional budget, more pleasure visitors to Mississippi are expected. The State's budgets for visitor promotion averaged about $25,000 per year between 1947 and 1958; since 1960 these budgets have averaged nearly $200,000 per year. During the first few years after the budget increase, the increases in expenditures by visitors were insignificant or nonexistent. In 1960, visitor expenditures attributable to increased advertising budgets amounted to $3 million; in 1961, there were no visitor expenditures attributable to increased advertising; but in 1964, there was $12 million in visitor expenditures that could be attributed to the increase in the advertising budget. As Mississippi continues to advertise, more out-of-state visitors can be expected to tour portions of the State. This would also increase the number of pleasure visits and the demand for additional outdoor recreation facilities.

Chart 14

PROJECTED OUT–OF–STATE VISITS TO MISSISSIPPI



Mississippi Research and Development Center

Projections made by Long-Range Planning Branch, Mississippi Research and Development Center, based on information from:

Lewis C. Copeland, Department of Statistics, College of Business Administration, The University of Tennessee, *Travel in Mississippi During 1967; An Economic Analysis of Tourists and the Travel Service and Transport Business*, prepared for the Travel Department, Perry L. Nations, Manager, Mississippi Agricultural and Industrial Board, Jackson, March, 1968.

L. J. Crampon and Paul W. DeGood, Southern California Laboratories of Stanford Research Institute, *Opportunities of Development of the Visitor Industry in Mississippi*, Feb., 1966.

It is assumed that as population increases the ratio of out-of-state visitors to population will decrease slightly. This is taken into consideration in projecting total out-of-state visitors per day for each of the projection intervals. It is also assumed that the percentage of pleasure visitors to total out-of-state visitors will increase due to the factors mentioned above.

A more accurate indicator of out-of-state demand for outdoor recreation in Mississippi is revealed in the number of registered guests in State Parks. The combined total of all revenue-producing activities on which records are kept indicates that 54.4% of the registered use is from other states. There is not a record of total visitation to state facilities by out-of-state guests. Table 18 reveals that 82.1% of all registered users of State Park campgrounds are from out-of-state and over half (58.3%) of all cabin rentals are to people outside of the State of Mississippi.

Table 18

STATE PARK REGISTERED VISITORS

(July, 1965 to December, 1968)

| Activity | In-State | | Out-of-State | |
|---|---|---|---|---|
| Camping | 39,897 | (17.9%) | 182,168 | (82.1%) |
| Group Camping | 72,537 | (69.1%) | 32,386 | (30.9%) |
| Cabin Rental | 27,261 | (41.7%) | 38,097 | (58.3%) |
| Boating | 106,150 | (64.3%) | 59,032 | (35.7%) |
| Fishing | 22,052 | (72.4%) | 8,387 | (27.6%) |
| Total | 267,807 | (45.6%) | 320,070 | (54.4%) |

SOURCE: Mississippi State Park System.

Four major urban areas just outside of the State boundaries produce the bulk of these out-of-state visitors: Memphis, Tennessee, located near the northwest corner of the State; Baton Rouge and New Orleans, Louisiana in the south; and Mobile, Alabama, near the southeast corner of the State (see Map 31).

The Outdoor Recreation Resources Review Commission Report correlated national socioeconomic characteristics with recreation participation. As this has not been done in Mississippi, the description of population and socioeconomic trends has limited application for planning. These trends provide significant insight into the magnitude of demand and indicate areas of the State in which demand may be greater than in others, but the type of area or facility needed is indicated most readily by the recreational habits and desires of residents and visitors.

In an effort to determine participation patterns of the Mississippi population, the Mississippi Research and Development Center conducted a survey during the fall of 1967. A form was sent to each of 2,000 persons selected by computer process from drivers' license records of the Mississippi Highway Safety Patrol. A total of 421 usable forms were returned. Since those who returned the forms were obviously interested in recreation, their responses indicated activities which merit attention.

While the survey provided significant insight into current recreation participation, it is now recognized that the sample drawn and the resultant return provided too small a base for useful correlation analysis. Moreover, demand estimates based on the survey were not as accurate as is desirable. Because of limitations in time, money, and manpower, it was impossible either to resurvey by mail or to conduct a field survey. It is recommended that during the next planning period a field survey be conducted (including nonresident as well as resident citizens) to produce a more statistically valid demand study.

Again, in view of the random selection and difficulties in obtaining higher return rates for a survey of this type, these 421 forms were considered adequate for projecting estimates on a statewide basis. This assumption was based on the fact that a method for measuring "true" demand, because of numerous variables and diversity of factors which influence outdoor recreation participation, is nonexistent and only indicators of demand are measurable. There is a strong probability that the projected demand estimates are conservative. However, this Plan is not a static document, and demand will be revised periodically as conditions change.

Chart 15 compares the percentage of respondents participating in activities covered by the survey for three groups – total, urban, and rural respondents. Far more respondents participate in freshwater fishing than in any other activity. Small game hunting and daytime sightseeing are also popular. Fishing and hunting reflect the predominantly rural character of the State, while sightseeing indicates the need for development of scenic routes, especially in or near urban areas where sightseeing is popular. Participation patterns of rural respondents follow closely those of all respondents, while the urban pattern varies widely in some activities, particularly small game hunting, out-of-state vacation travel and deer and turkey hunting.

The popularity of out-of-state vacation travel among urban respondents is especially interesting as it reflects the desire and ability to travel which accompanies the urbanite's higher education and income level. Mississippi cannot ignore the significance of this trend.

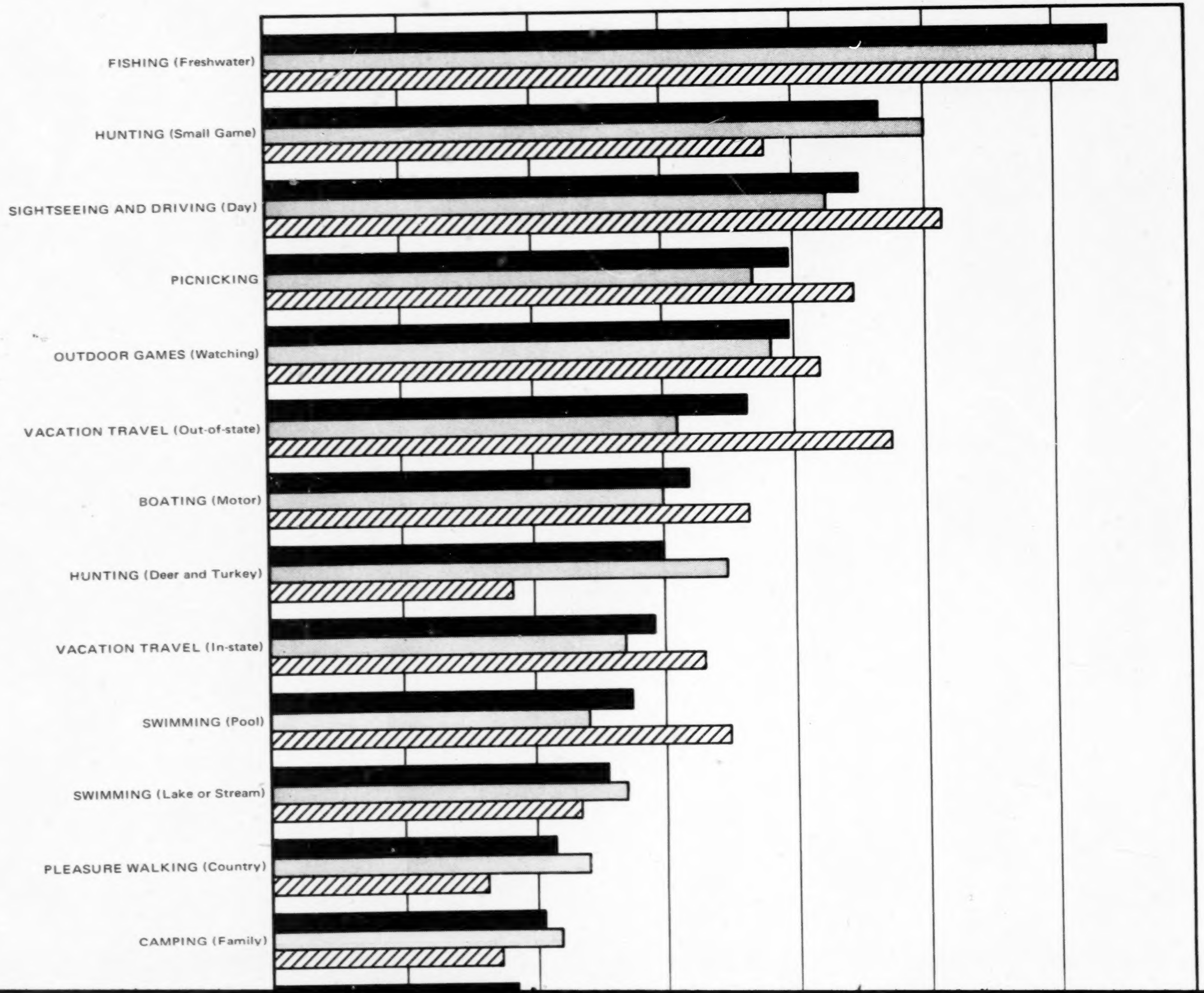
The ORRRC Report states that the most popular destination of interregional vacation travel is the South. While southern states such as Florida may offer more to the vacationer, Mississippi has a great potential in the tourist industry which is largely untapped.

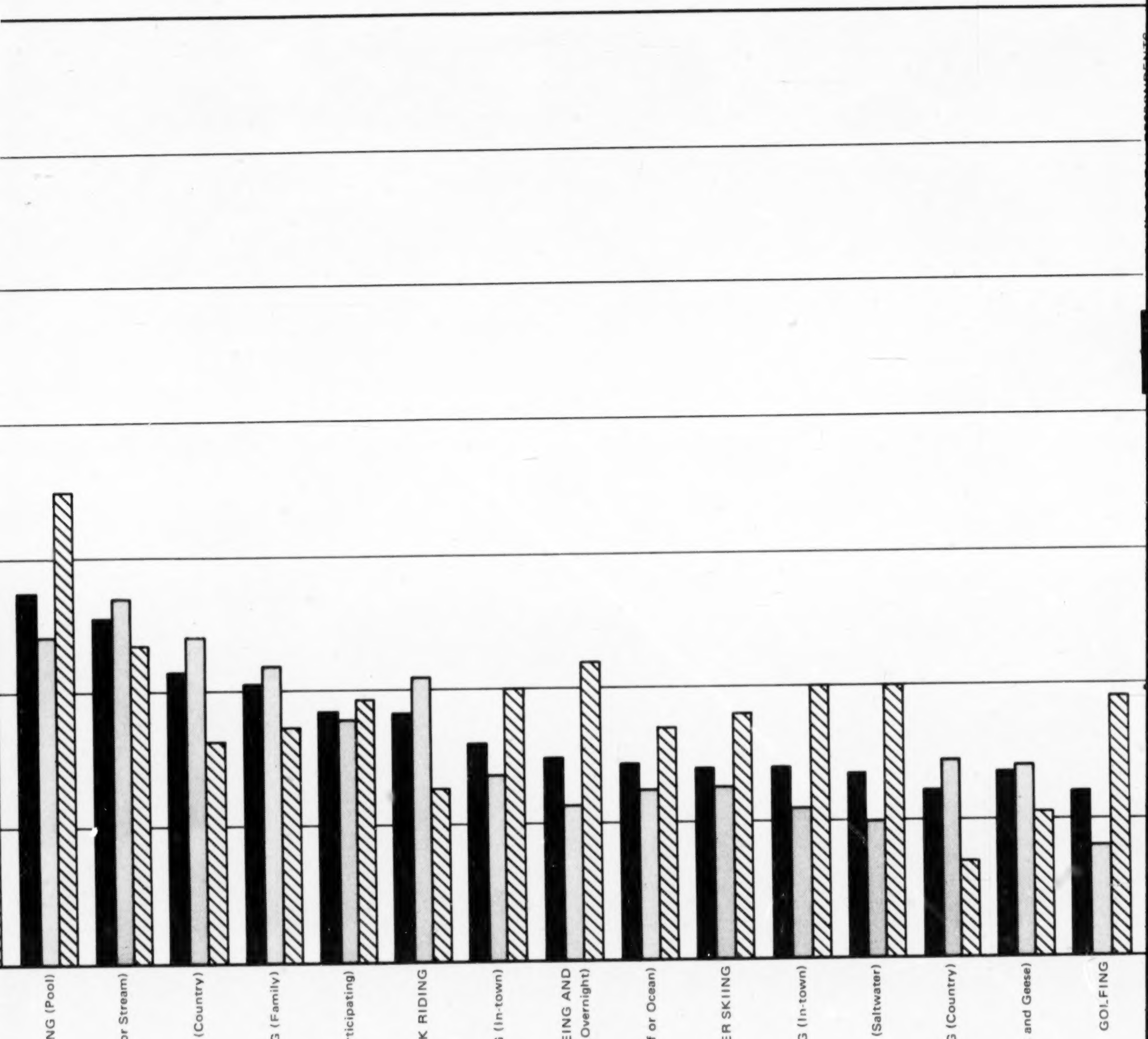
It must be recognized that Chart 15 is not wholly representative of demand. It indicates only activity interests for which areas and facilities should be provided. More simply, it shows activities in which people participated at least one time in a year. Chart 16 is a more useful indicator of needed facilities. It shows use pressure, or the number of times participation occurred in various activities in 1967. The participation rates of survey respondents were applied to the State's population to determine the 1967 activity occasions shown.

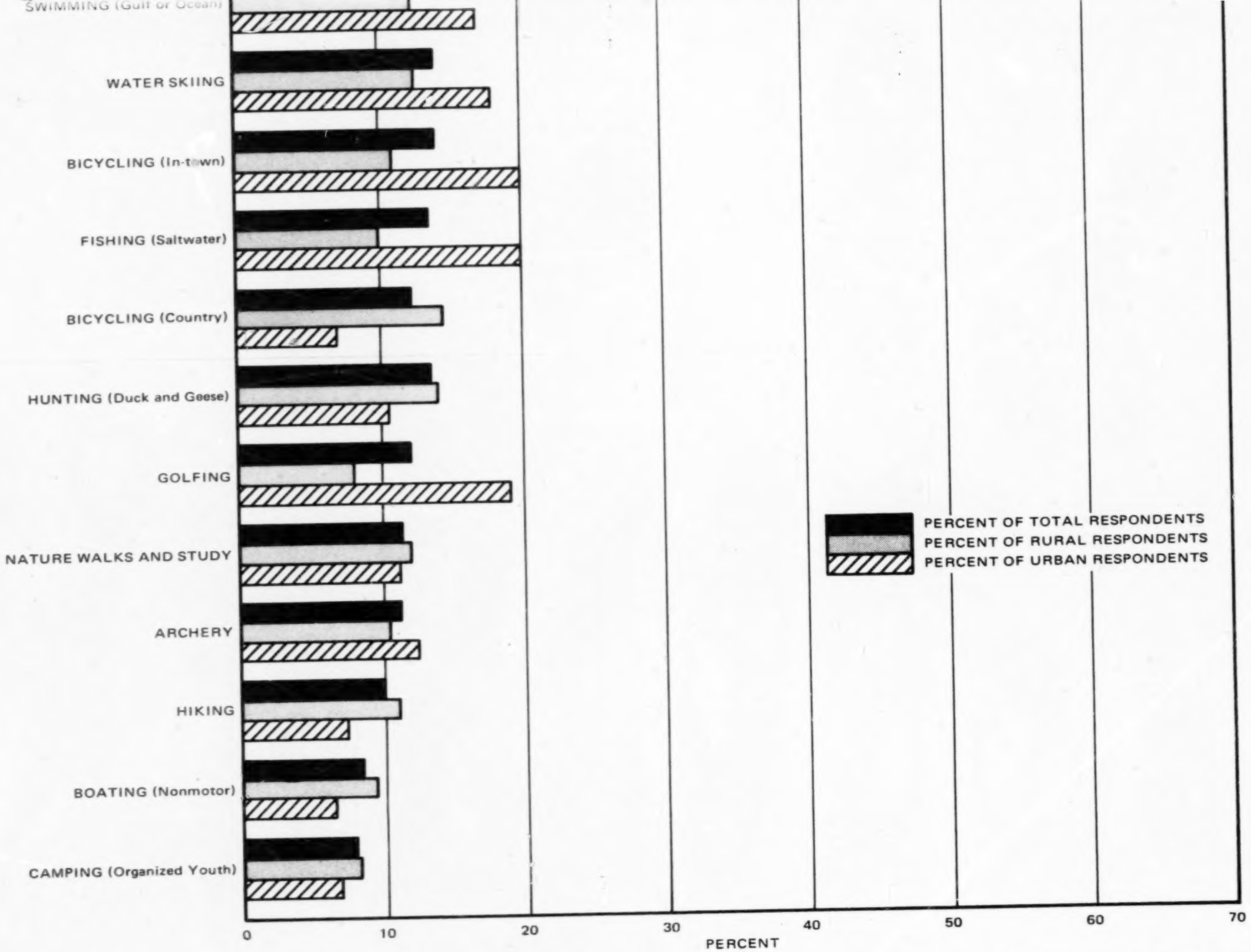
One useful function of the survey was to corroborate the opinion that Mississippi participation patterns differ from national patterns. Fishing, hunting, and horseback riding are far more popular in Mississippi than in the Nation as a whole. Table 19 lists activities by order of preference for Mississippi, the southern states, and the United States.

## Chart 15

## PARTICIPATION PATTERNS OF RESPONDENTS TO THE MISSISSIPPI RECREATION SURVEY, 1967




SWIMMING (Pool)
SWIMMING (Lake or Stream)
PLEASURE WALKING (Country)
CAMPING (Family)
OUTDOOR GAMES (Participating)
HORSEBACK RIDING
PLEASURE WALKING (In-town)
SIGHTSEEING AND DRIVING (Overnight)
SWIMMING (Gulf or Ocean)
WATER SKIING
BICYCLING (In-town)
FISHING (Saltwater)
BICYCLING (Country)
HUNTING (Duck and Geese)
GOLFING

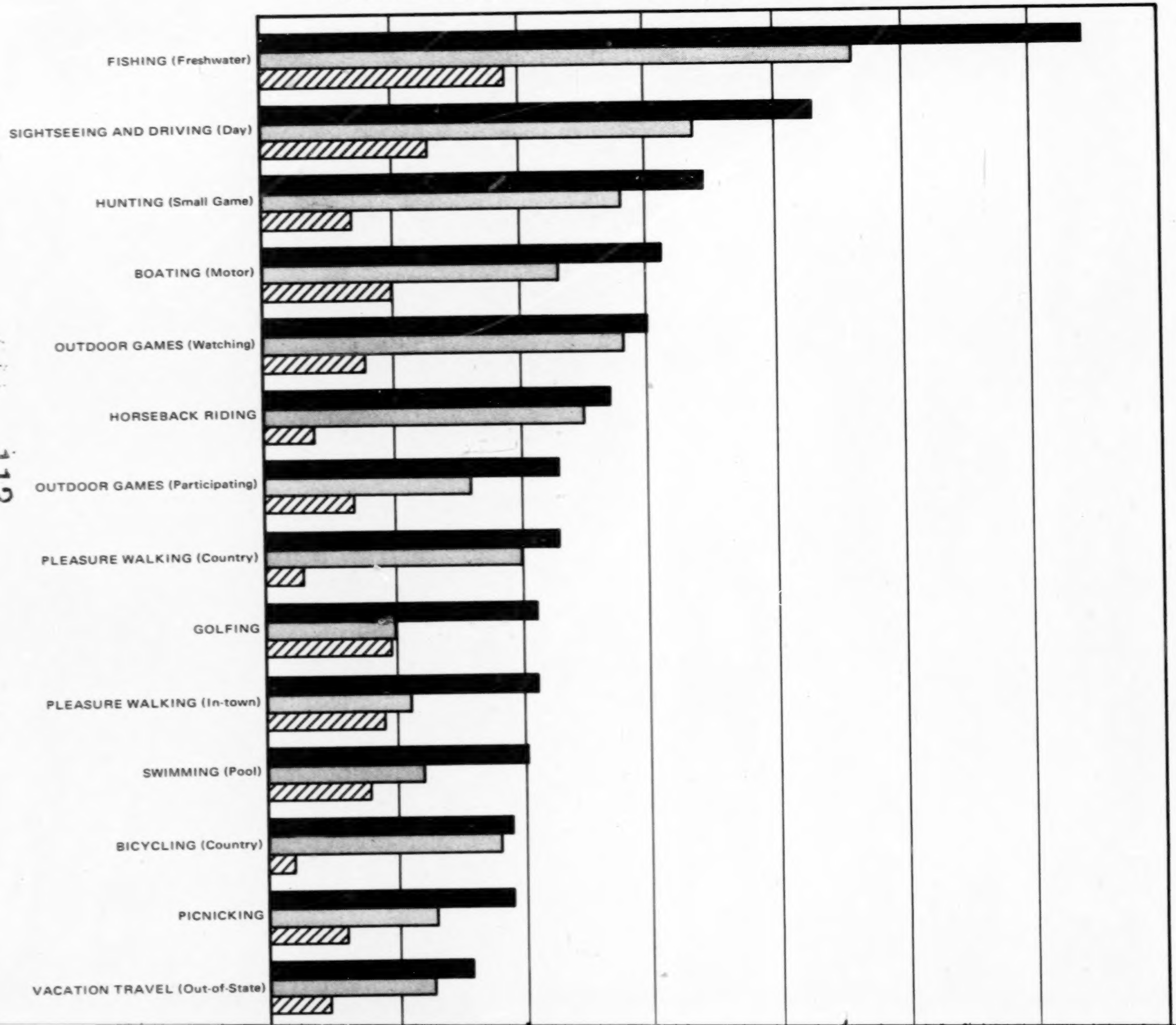


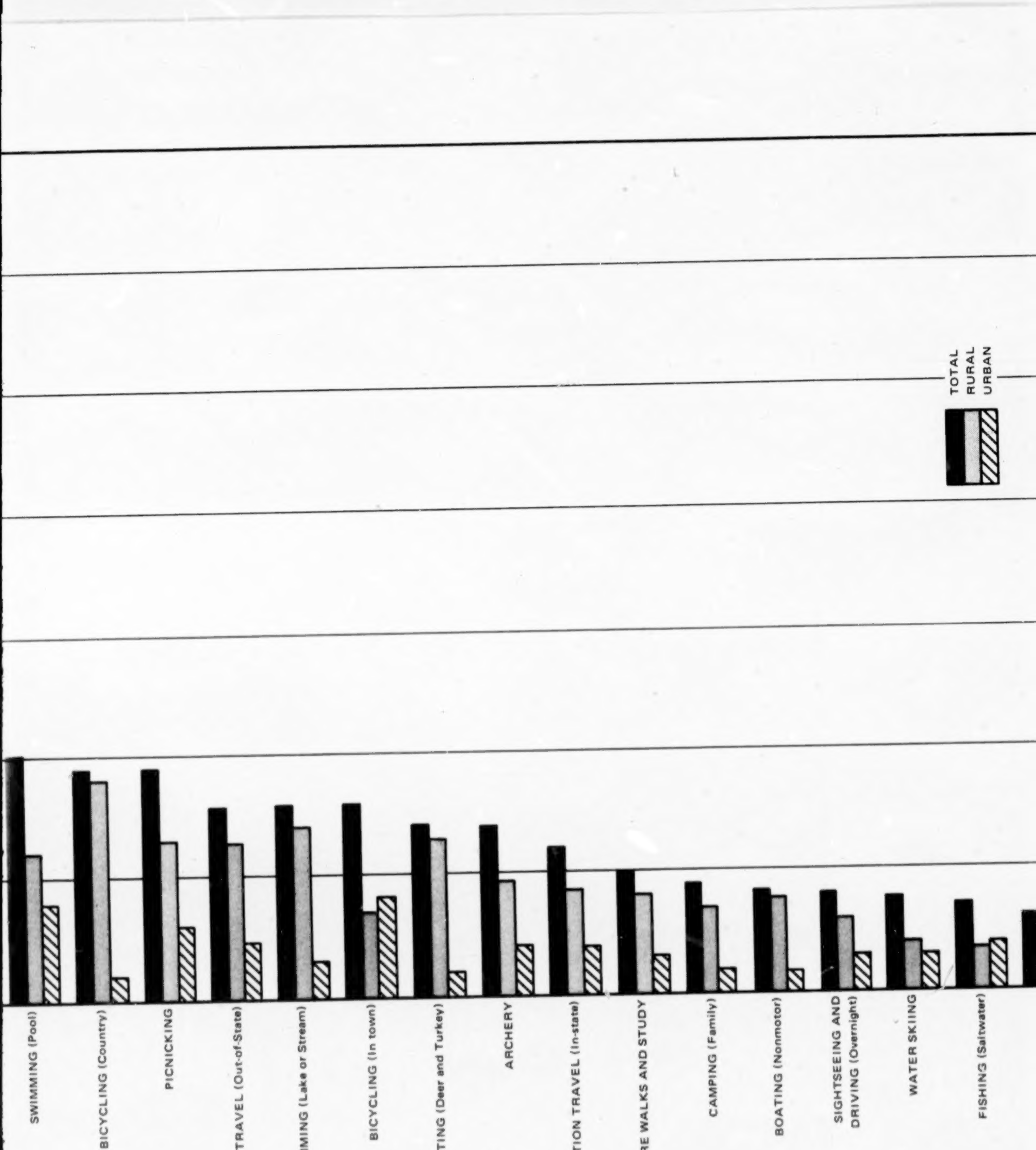
SOURCE: Mississippi Recreation Survey, 1967.

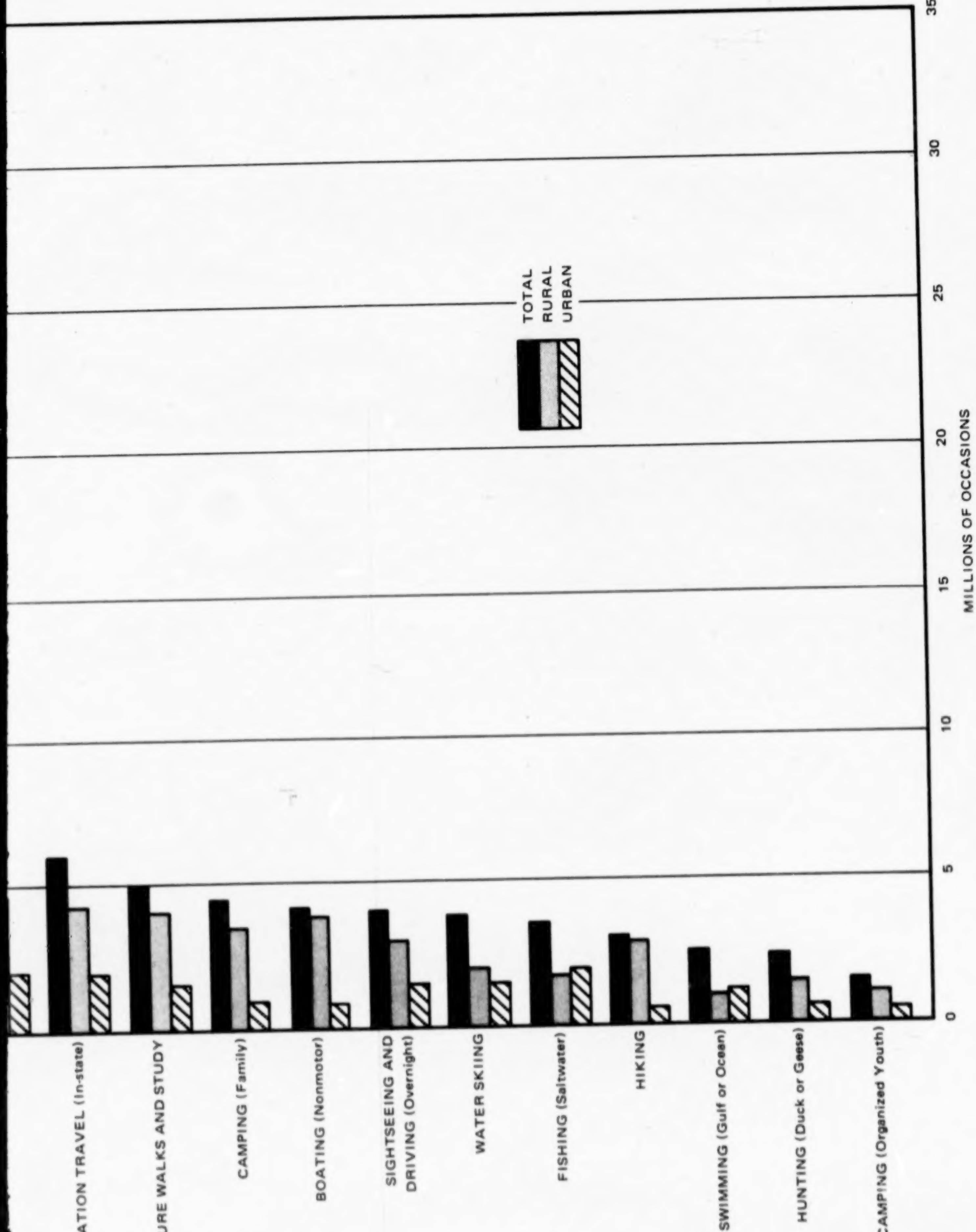
Mississippi Research and Development Center

Chart 16

ACTIVITY OCCASIONS OF MISSISSIPPI RESIDENTS, 1967




TOTAL
RURAL
URBAN
SWIMMING (Pool)
BICYCLING (Country)
PICNICKING
VACATION TRAVEL (Out-of-State)
SWIMMING (Lake or Stream)
BICYCLING (In town)
HUNTING (Deer and Turkey)
ARCHERY
VACATION TRAVEL (In-state)
NATURE WALKS AND STUDY
CAMPING (Family)
BOATING (Nonmotor)
SIGHTSEEING AND DRIVING (Overnight)
WATER SKIING
FISHING (Saltwater)



SOURCE: Mississippi Recreation Survey, 1967.

Mississippi Research and Development Center

Table 19

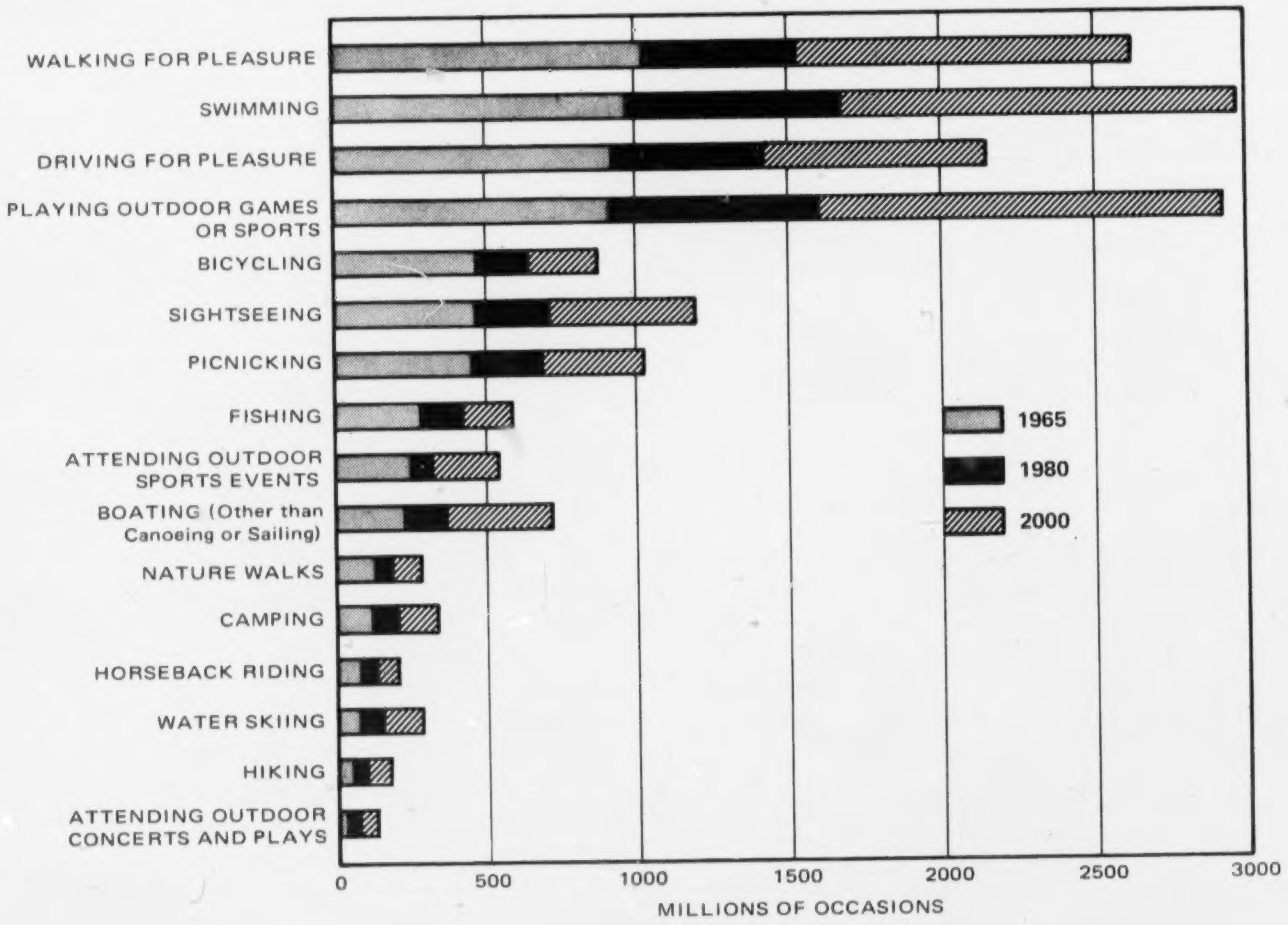
ANNUAL OUTDOOR RECREATION PARTICIPATION

| Rank | Mississippi Recreation Survey (1967) | Southern States ORRRC (1959) | United States ORRRC (1959) |
|---|---|---|---|
| 1 | Fishing | Pleasure Driving and Sightseeing | Pleasure Driving and Sightseeing |
| 2 | Hunting | Pleasure Walking | Pleasure Walking |
| 3 | Sightseeing and Driving | Swimming | Swimming |
| 4 | Pleasure Walking | Outdoor Games and Sports (Participation) | Outdoor Games and Sports (Participation) |
| 5 | Swimming | Bicycling | Picnicking |
| 6 | Bicycling | Picnicking | Bicycling |
| 7 | Boating (Motor) | Outdoor Games and Sports (Watching) | Outdoor Games and Sports (Watching) |
| 8 | Outdoor Games and Sports (Watching) | Fishing | Fishing |
| 9 | Vacation Travel | Boating (Motor) | Boating (Motor) |
| 10 | Horseback Riding | Nature Walks and Study | Nature Walks and Study |
| 11 | Outdoor Games and Sports (Participation) | Camping | Camping |
| 12 | Golfing | Hunting | Hunting |
| 13 | Picnicking | Hiking | Hiking |
| 14 | Archery | Water Skiing | Water Skiing |
| 15 | Nature Walks and Study | Horseback Riding | Horseback Riding |
| 16 | Camping (Family) | | |
| 17 | Boating (Nonmotor) | | |
| 18 | Water Skiing | | |
| 19 | Hiking | | |
| 20 | Camping (Organized Youth) | | |

Summertime outdoor recreation participation was computed in a nationwide survey in 1965 and the comparisons of trends for Mississippi and the United States differ similarly to annual participation figures (see Charts 17 and 18).

Chart 17

UNITED STATES
SUMMERTIME OUTDOOR RECREATION PARTICIPATION

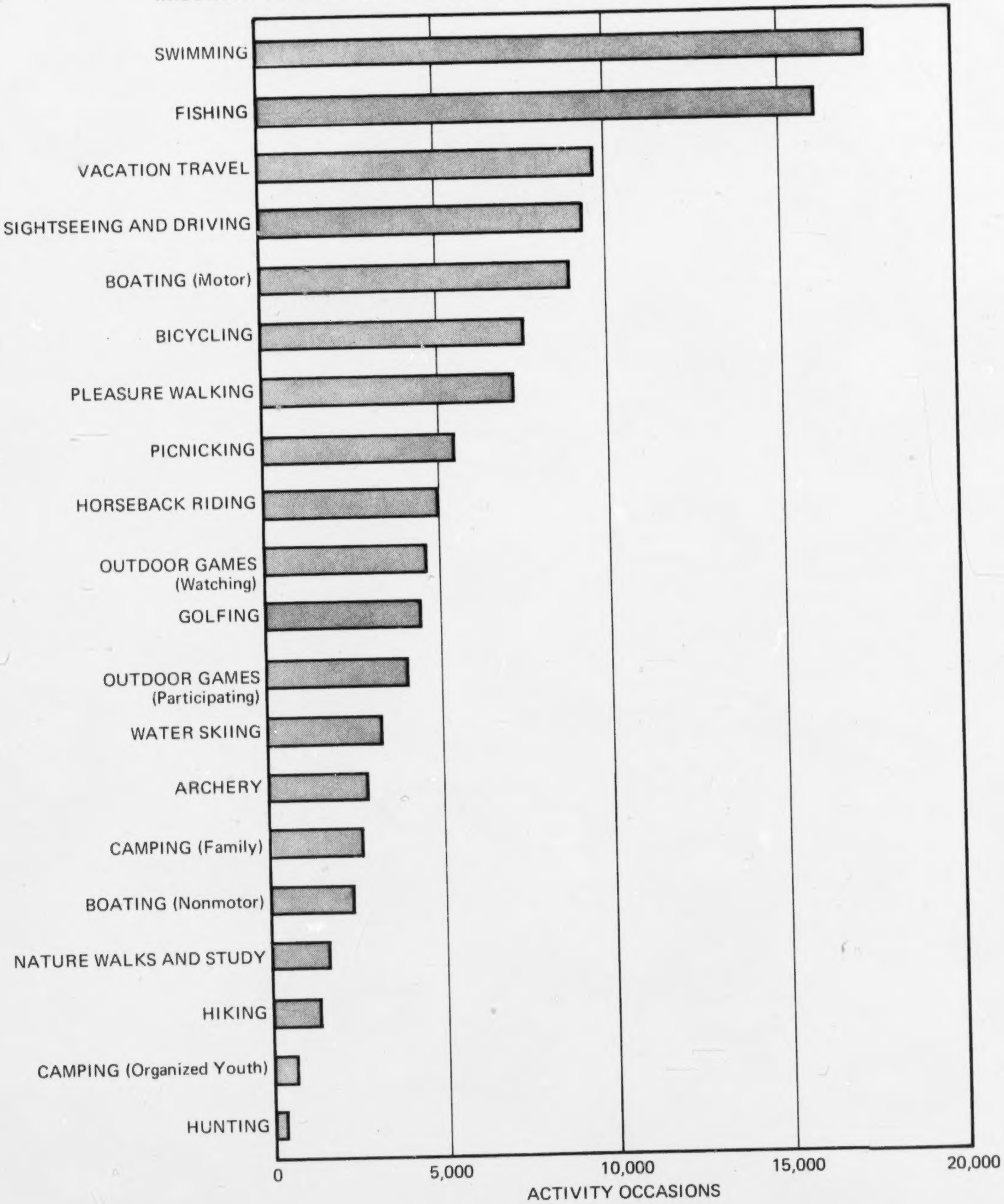


Mississippi Research and Development Center

SOURCE: Department of the Interior, Bureau of Outdoor Recreation, *Outdoor Recreation Trends,* April, 1967.

Chart 18

MISSISSIPPI SUMMERTIME OUTDOOR RECREATION PARTICIPATION



SOURCE: Mississippi Recreation Survey, 1967.

Chart 19 shows hunting and fishing licenses issued in fiscal years 1958–59 and 1967–68. In 1968, 227,980 Mississippians – over 15% of the population 16 years of age and older – bought hunting licenses. In the same year there were 233,355 resident licensed fishermen – 16% of the population 16 years of age and older. This represents an increase of 15.9% over 1959 for hunting and 16.8% for fishing.

As shown in the chart, nonresidents also like to fish in Mississippi. In 1968, nonresidents bought 27.8% of the fishing licenses issued, compared to 26.9% in 1959. Since the demand for fishing indicated in activity occasions is only for Mississippi residents, the demand for fishing is probably even greater than indicated because of the large number of nonresident fishermen. This fact is considered in the Needs section.

It must be noted that accurate records on the number of individuals hunting and fishing are not available for several reasons:

1. Any resident citizen of the State of Mississippi who has not reached the age of 16 years or has reached the age of 65 years is entitled to engage in hunting and fishing without any fee or license charge.
2. No license is required for a person to hunt or fish on lands in which the record title is vested in such person.
3. Nonresident children under 14 years of age need not purchase licenses.
4. Persons who fish from the bank with live bait do not require a license.

Nevertheless, the chart indicates the sustained popularity of these two activities from 1958 to 1968.

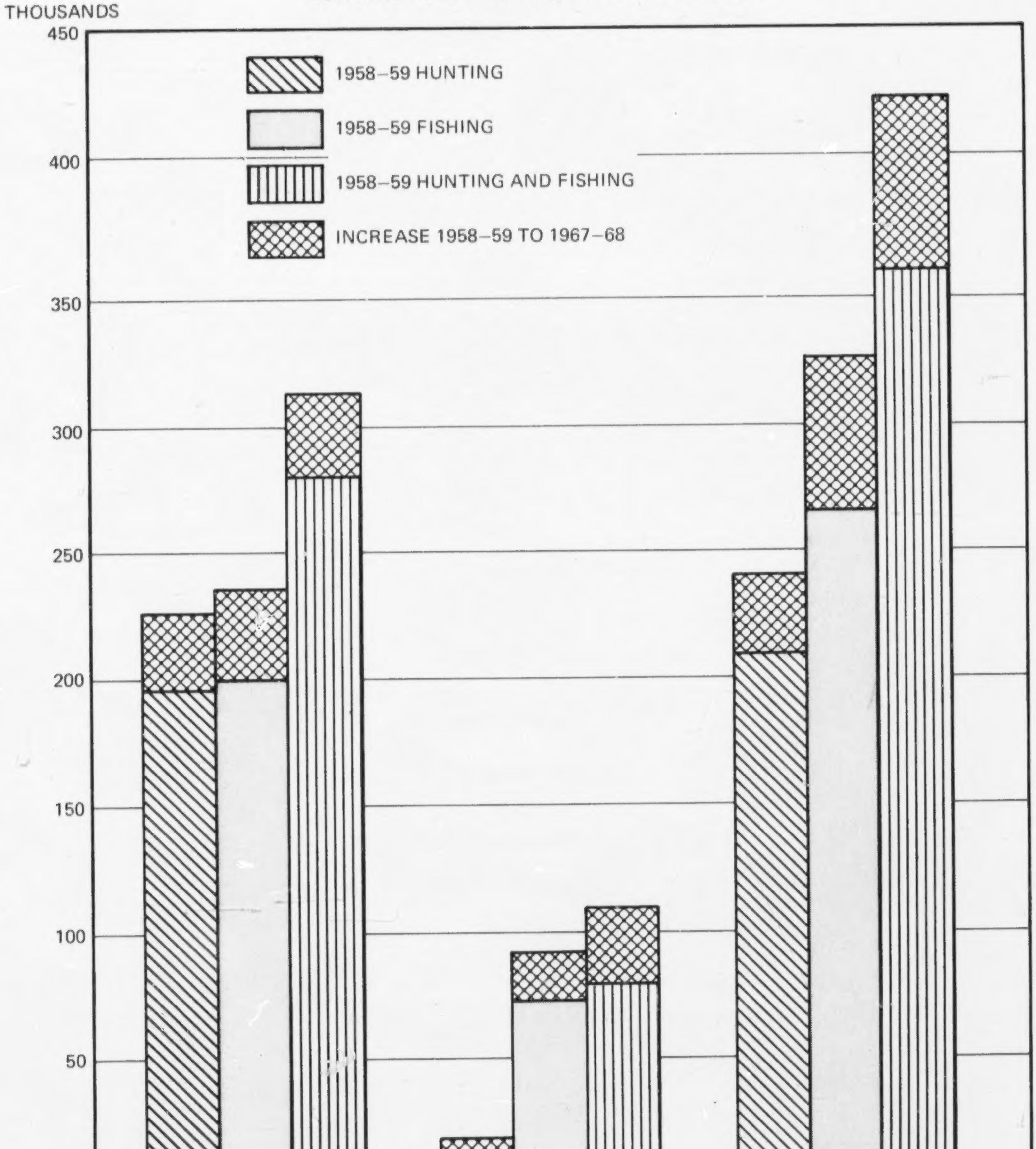
Motorboating is another activity favorite among Mississippians. The Mississippi Boat and Water Safety Commission recently completed a survey that revealed there are 23,669 valid boat registrations in Mississippi – one for every 100 persons, and boaters have over 90 million dollars invested in boats, motors, and trailers. The Commission predicts that boating will double in the next five years.

Boating is a relative newcomer to the recreation scene. It is one of several water sports which became popular with the advent of the great reservoir systems. This illustrates a basic principle in outdoor recreation: what people did with their leisure time is not a strong foundation on which to build future demand for leisure time activities, primarily because present use is controlled by the availability of existing supply and the quantity, quality, location, and accessibility of that supply.

Visitation to the four Corps of Engineers Reservoirs in Mississippi shows a general upward trend, especially at the larger, more developed reservoirs – Sardis and Grenada. In 1964, when the Ross Barnett Reservoir was opened, visitation to Grenada, especially, showed a setback, but within a year participation was climbing again. This illustrates the point that when facilities are provided, participation will occur.

This is also illustrated in the visitation estimates of the Mississippi State Park System. Chart 21 shows a definite upward trend over the years, but a leveling trend between 1951 and 1961. This might be explained by the parks reaching their use saturation point. During the mid-fifties, four new parks were constructed. When the new parks were placed in service, visitation again experienced a sharp upward trend. Participation simply cannot occur unless there is an opportunity.

## Chart 19
## HUNTING AND FISHING LICENSES ISSUED



SOURCE: Mississippi Game and Fish Commission.

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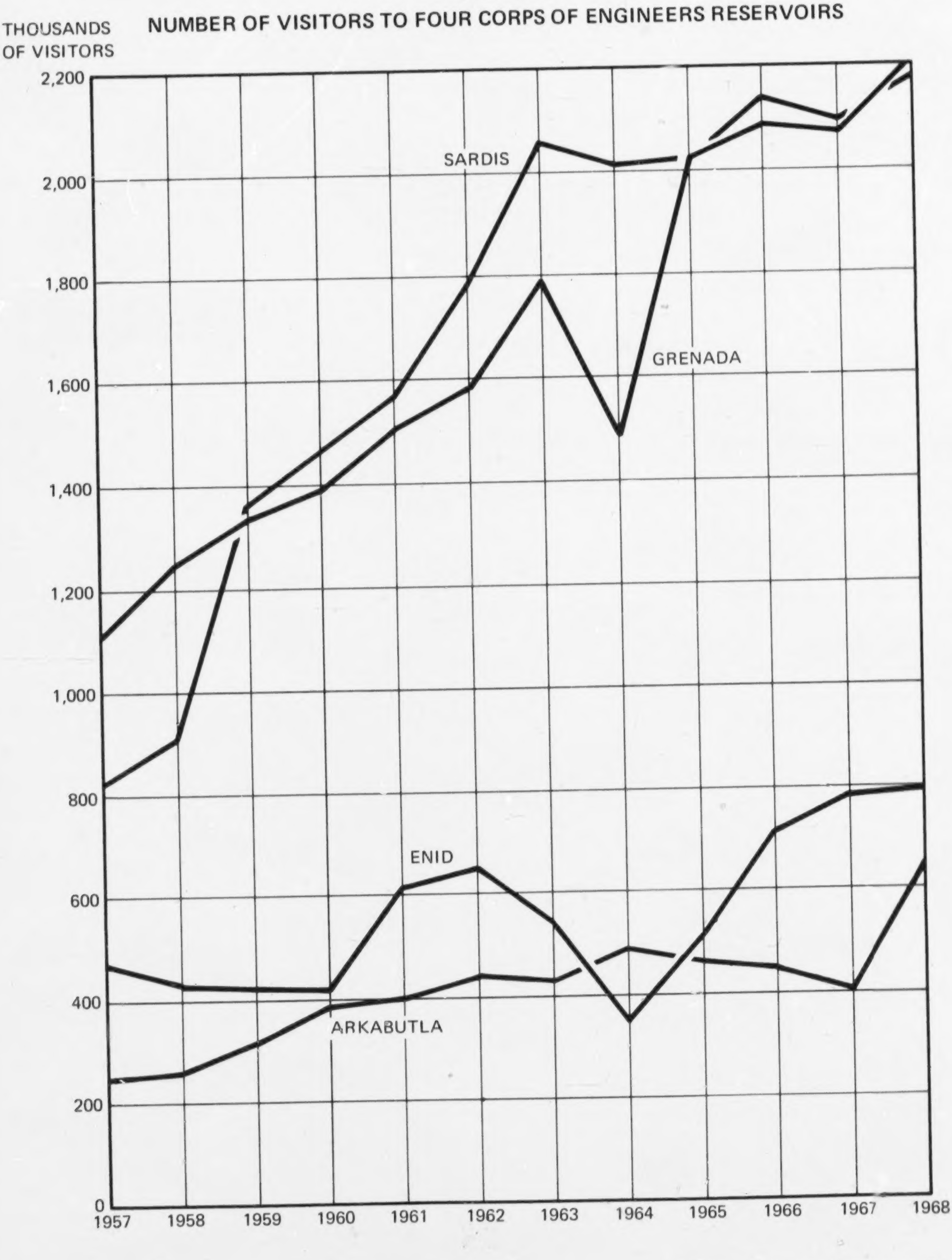
## Chart 20

## NUMBER OF VISITORS TO FOUR CORPS OF ENGINEERS RESERVOIRS



SOURCE: Vicksburg District, U. S. Army Corps of Engineers.

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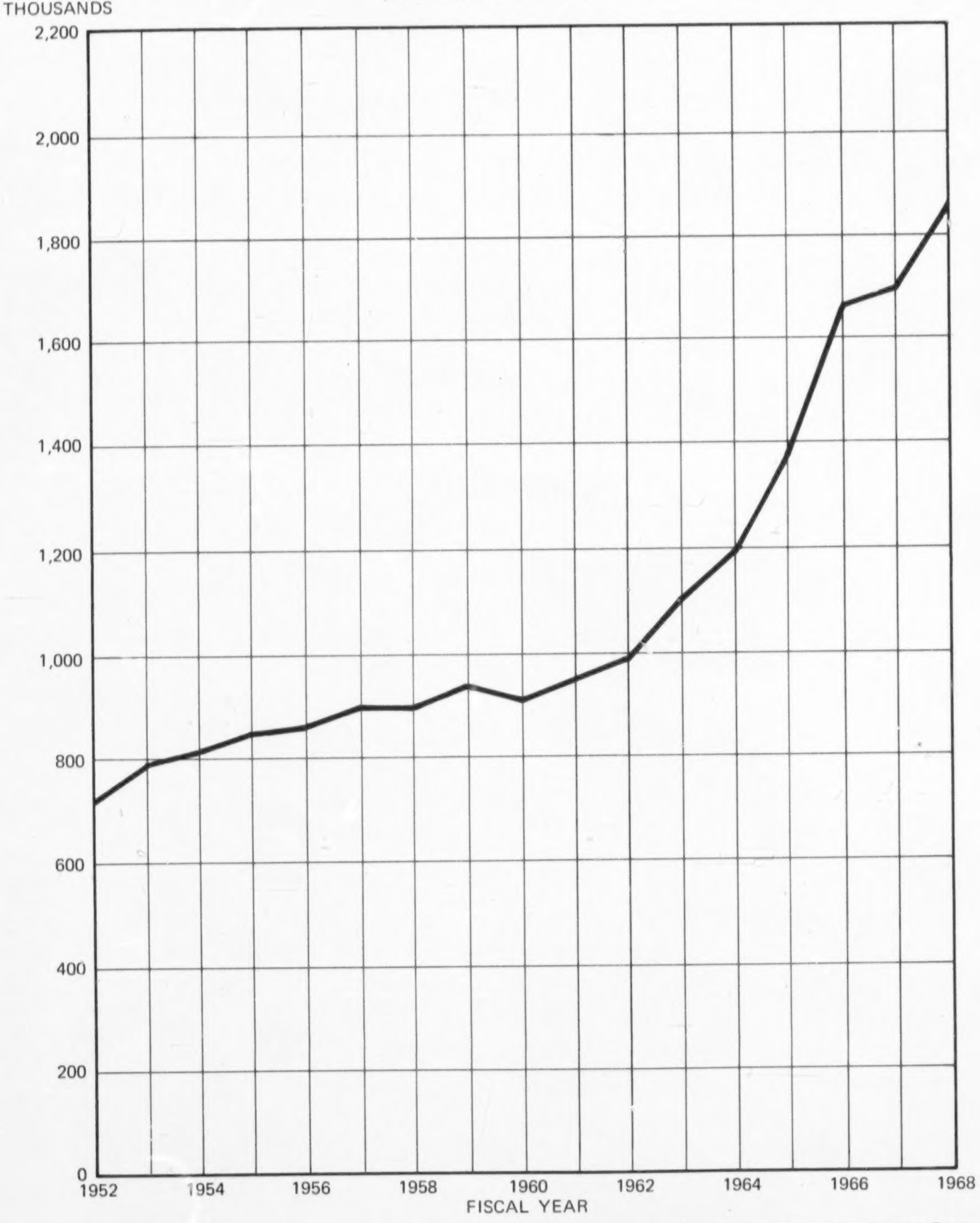
Chart 21

## ESTIMATED STATE PARK VISITATION

(Thousands of Persons)

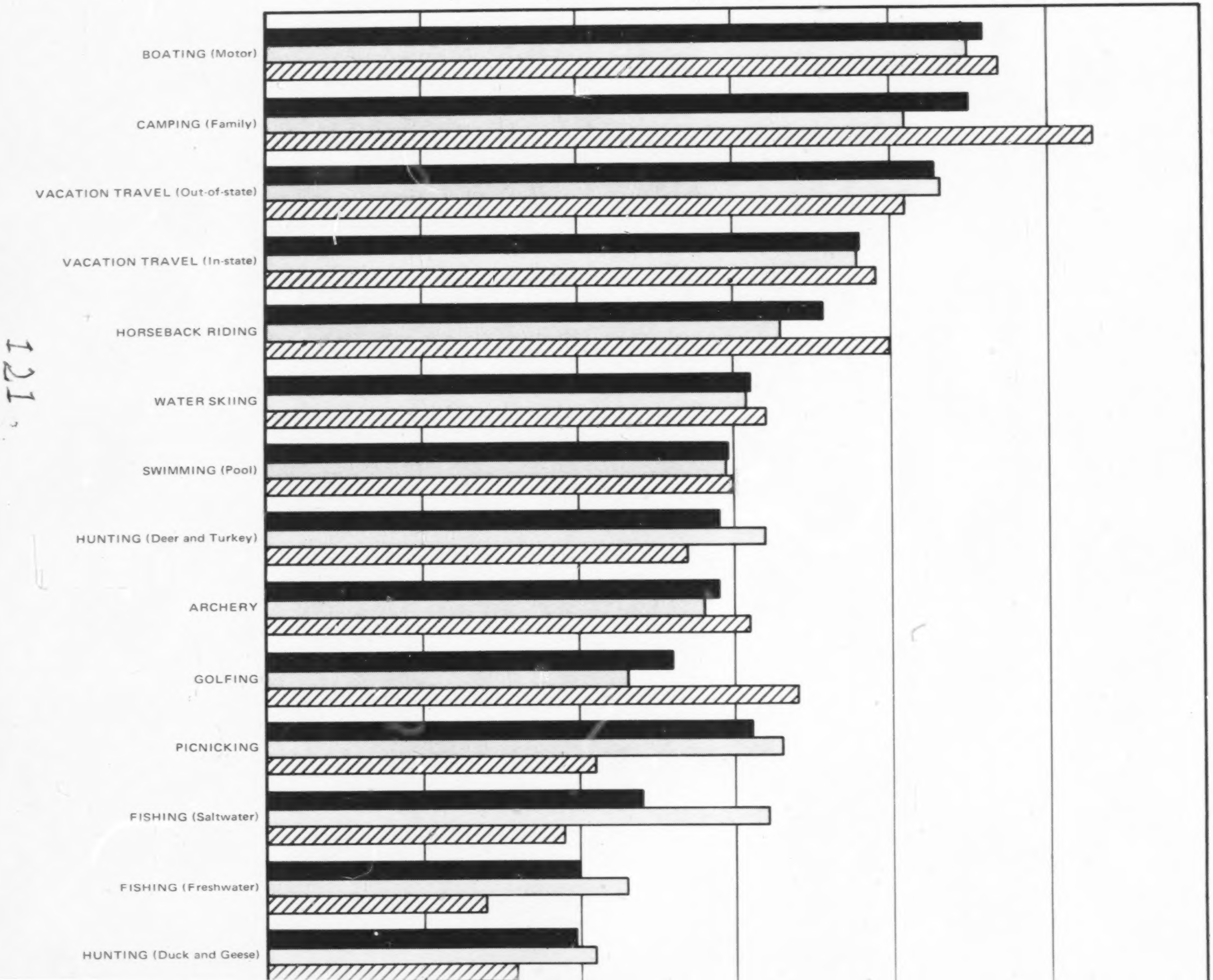


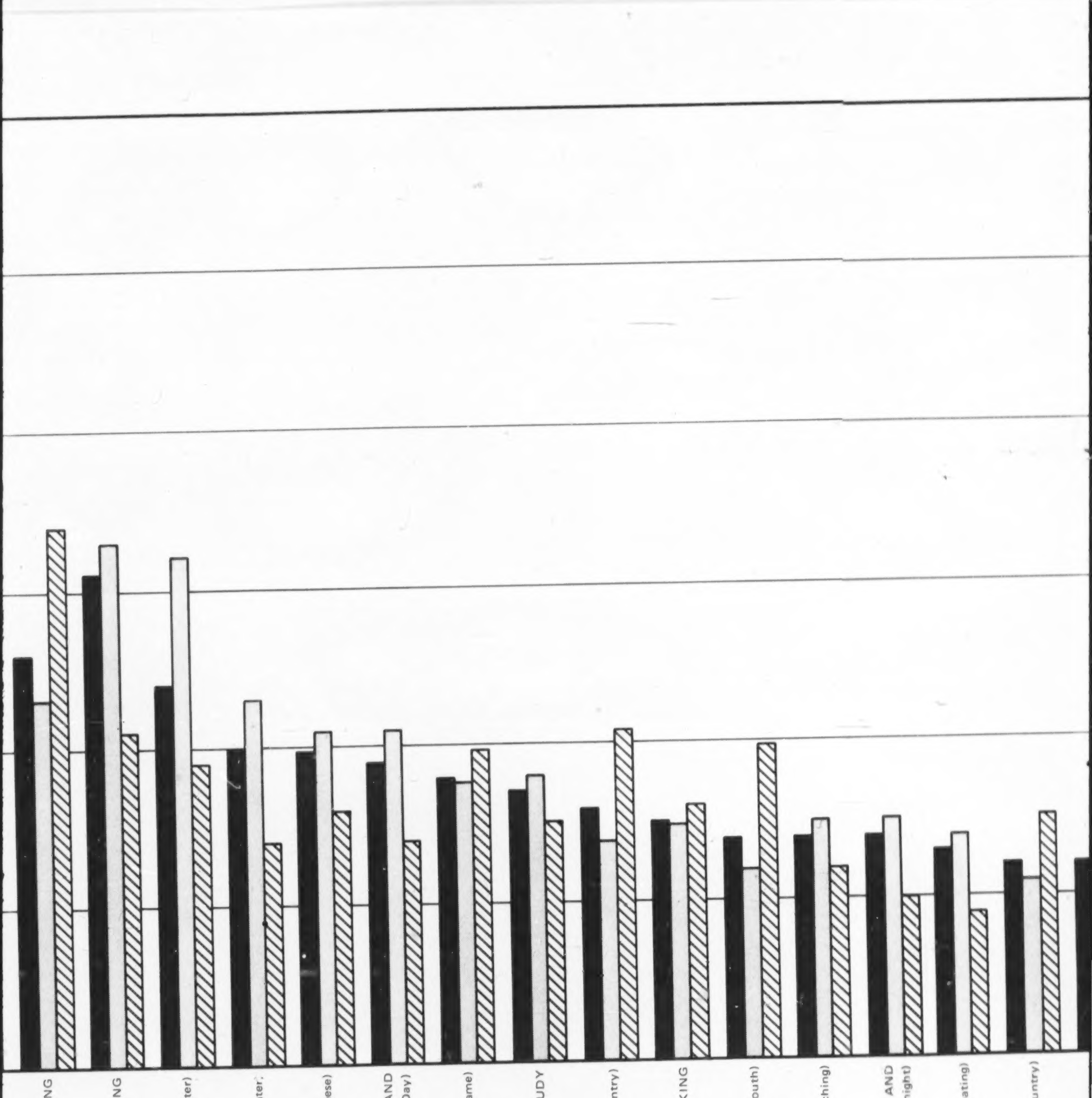
SOURCE: Mississippi Park System.

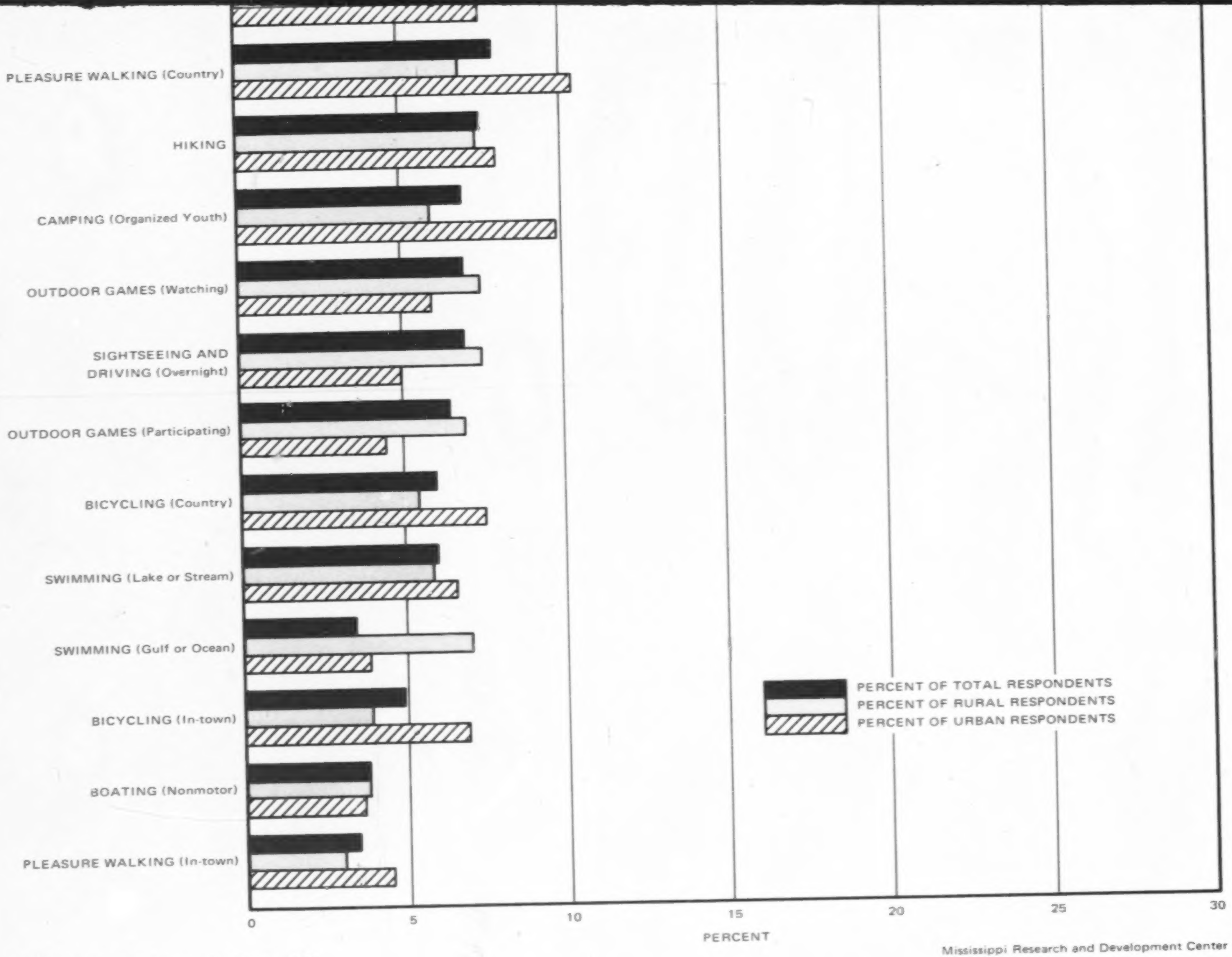
Mississippi Research and Development Center

Chart 22

RESPONDENTS WHO ARE NONPARTICIPANTS BUT DESIRE PARTICIPATION




GOLFING
PICNICKING
FISHING (Saltwater)
FISHING (Freshwater)
HUNTING (Duck and Geese)
SIGHTSEEING AND DRIVING (Day)
HUNTING (Small Game)
NATURE WALKS AND STUDY
PLEASURE WALKING (Country)
HIKING
CAMPING (Organized Youth)
OUTDOOR GAMES (Watching)
SIGHTSEEING AND DRIVING (Overnight)
OUTDOOR GAMES (Participating)
BICYCLING (Country)



Mississippi Research and Development Center

SOURCE: Mississippi Recreation Survey, 1967.

Therefore, an attempt was made in the Mississippi Recreation Survey to include some measure of unsatisfied demand – individuals who would like to participate in an activity but for various reasons do not. Chart 22 compares total, urban, and rural responses to participation desired. Motorboating, family camping, and out-of-state vacation travel are desired by more people than are other activities. As these are all activities which require money, the expected rise in income shown on Table 18 may convert desire into participation.

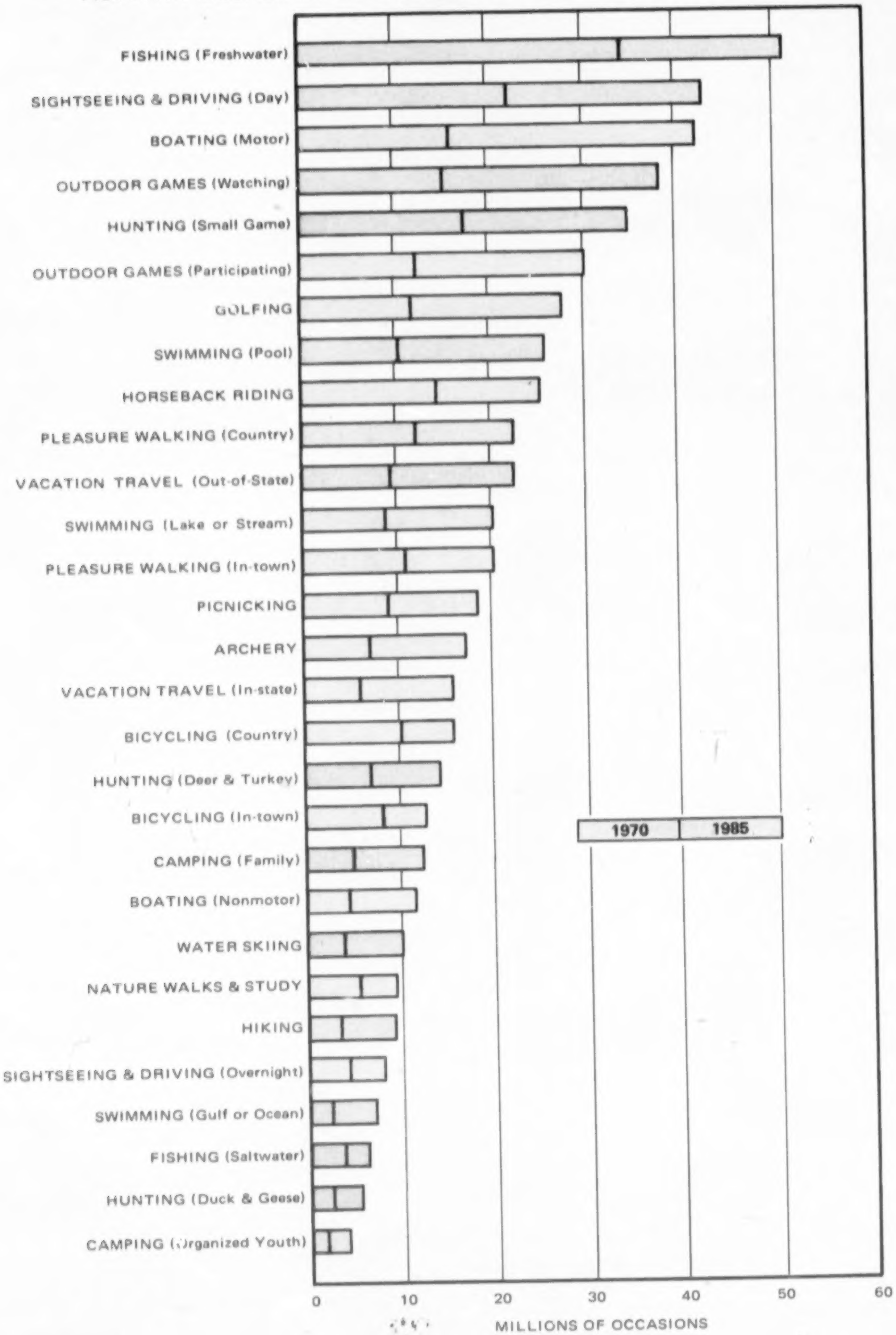
What future participation will be, however, is at best an educated guess. As recognized in ORRRC Study Report 20, popular tastes may change. Limitations of known valid demand methodology and the small survey return simply cannot be ignored in projecting demand in Mississippi, and tend to invalidate projections of activity occasions. The reservation, for computing true demand stated throughout this chapter should not be viewed as a rejection of the methodology outlined in the reports by the Outdoor Recreation Resources Review Commission and by the Bureau of Outdoor Recreation. The ORRRC/BOR concept still appears to be the best available means by which quantitative demand estimates can be made, and were used in projection indicators of future demand in this Plan. In this study the average number of activity occasions for the total population as shown by the 1967 Mississippi Recreation Survey was projected into the future by modifying national percentage increases to fit Mississippi's characteristics. The charts showing the increase in activity occasions for various activities should indicate areas of greatest need.

Chart 23 shows projected activity occasions for 1985, while Chart 24 shows the increment in activity occasions from 1970 to 1985, or the activities for which demand will increase the most. Although the total activity occasions shows the activities in which people are most interested, the increase in activity occasions shows the activities for which the most new facilities will be needed. For instance, freshwater fishing will be the number one activity in 1985, but it is already number one and in actual increase it ranks sixth. A third chart (25) shows the percentage increase in activity occasions from 1970 to 1985. The activities with high percentage increases should be given attention when computing needs, although some of the activities have such a small amount of participation that only a few facilities would be needed to satisfy the demand.

Total activity occasions are expected to jump from over 280 million in 1970 to over 583 million by 1985. The most spectacular numerical increases will be in motorboating and watching outdoor games, but participation will more than double in other activities for which demand is relatively small, such as hiking, family camping, and organized youth camping. Since facilities for most of these activities fail to satisfy current demand, special emphasis on them would be desirable. It should also be noted that participation will more than double in all water sports except fishing. There should be a need for the construction of pools, reservoirs, and lakes and, more critically, the development of recreation areas around them.

## Chart 23

## ACTIVITY OCCASIONS OF MISSISSIPPI RESIDENTS, 1970 AND 1985

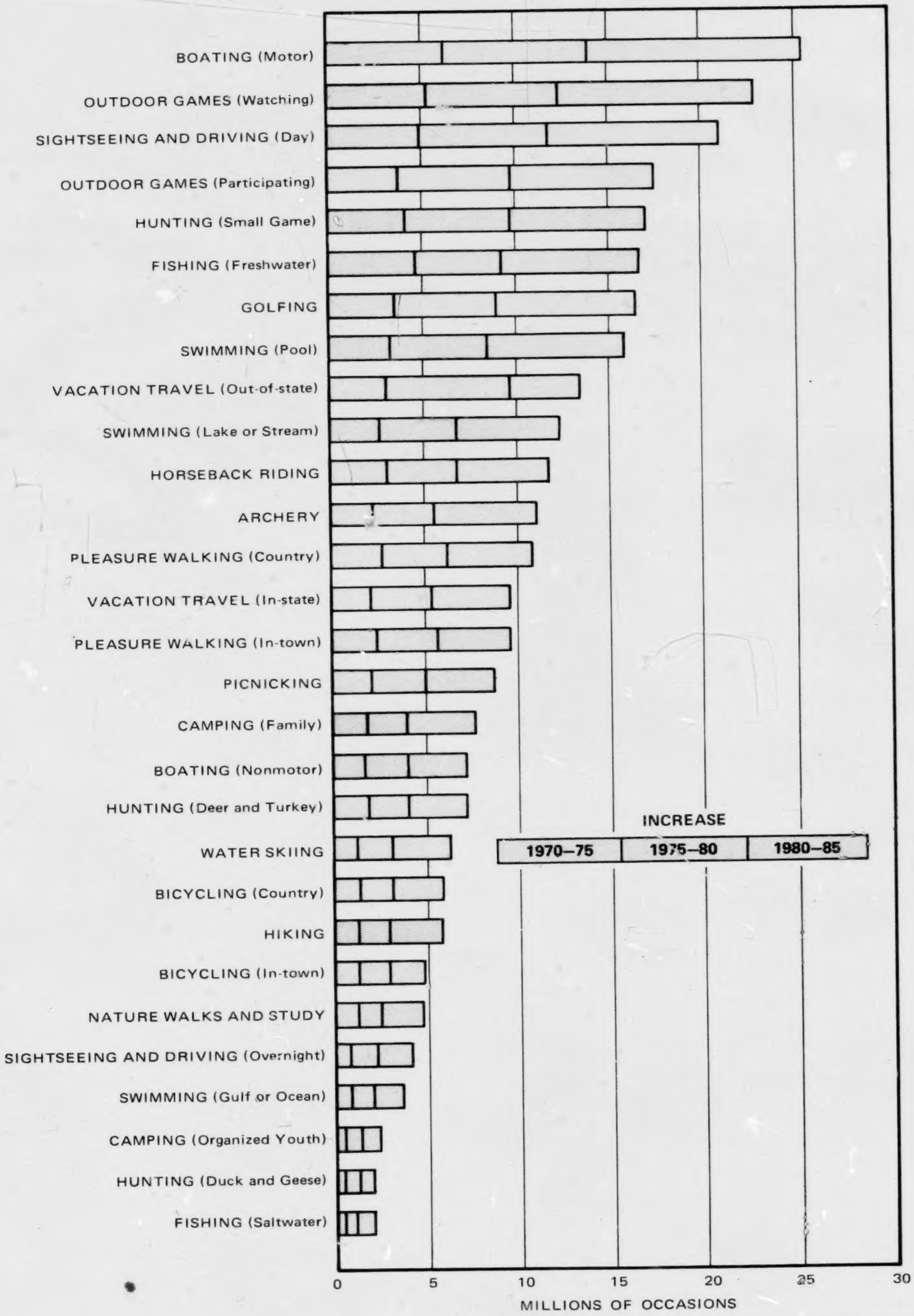


SOURCE: Mississippi Recreation Survey, 1967.

Mississippi Research and Development Center

## Chart 24

## INCREASE IN ACTIVITY OCCASIONS, 1970 – 1985

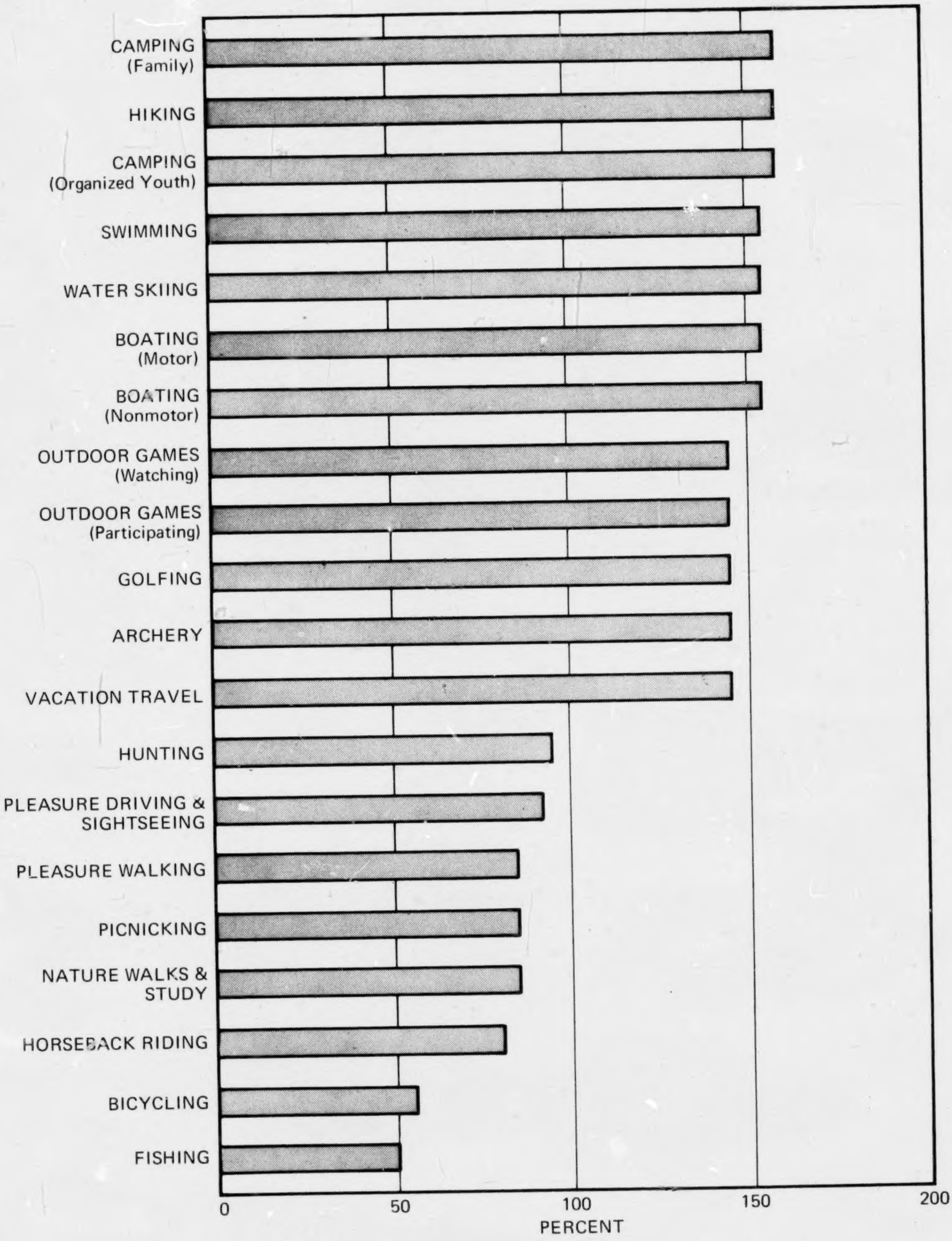


SOURCE: Mississippi Recreation Survey, 1967.

Mississippi Research and Development Center

Chart 25

ANTICIPATED PERCENTAGE INCREASE IN ACTIVITY OCCASIONS, 1970–1985



SOURCE: Mississippi Recreation Survey, 1967.

Mississippi Research and Development Center

## STANDARDS

As previously stated, demand for areas and facilities in Mississippi is expressed in terms of use-oriented areas and facilities requirements based on standards which have been adjusted to existing and projected participation patterns. These calculations are related to carrying capacities of existing supply for determination of area and facility needs. This decision was reached because of the various factors affecting demand, particularly supply. Because of the low participation survey, the prevailing social and economic conditions, and the lack of quality development in Mississippi, it is one goal of this plan to insure sufficient and adequate opportunities for quality participation in a recreational environment. Desirable use capacities were developed for consideration in planning areas and facilities and were used for developing need projections in this Plan. In our society, once land is occupied and developed, it becomes virtually impossible to change its character.

Mississippi has never had uniform standards for statewide recreation development and due to the lack of uniform national standards, each State agency and political subdivision has been developing areas in a more or less haphazard manner with a minimum of planning for environmental preservation and design.

Standards for planning, designing, developing, and maintaining recreation areas and facilities are considered a fundamental aspect of this Plan. Such standards have been carefully developed and are presented in this chapter in outline summary form according to type of recreation areas and facilities. Detailed development standards are found in Appendix 3–B. These standards should be viewed as a guide and not as a goal. It is recognized that with changing socioeconomic factors, these standards must be periodically reviewed and revised to conform to changing conditions. They should not be veiwed as absolute, although the standards presented in this Plan are considered to be minimum to decide the type and quality of outdoor environment in which to engage in recreational activities.

With the amount of open land now in Mississippi, the State is in a prime position to provide adequate recreation land for future generations and to prevent many of the problems now being experienced by the more urbanized and populated states east of the Mississippi River. The ultimate amount of acreage and number of facilities will depend largely upon land use capacities and the best possible use of each individual site.

Area and facility per capita standards can best be adapted to areas which are primarily user-oriented and are not readily adaptable to areas which are primarily resource-oriented. A ratio between area and facility units and population is suggested for each type of area and facility. Types of facilities or equipment and desirable use capacities are suggested for each area and activity.

## AREA AND FACILITY STANDARDS

| | |
|---|---|
| I. Recreational Areas | |
| A. Parks and Recreation Areas | 90 acres per 1,000 population |
| 1. City Areas | 10 acres per 1,000 population |
| 2. County or Metropolitan Areas | 15 acres per 1,000 population |
| 3. Regional Areas | 20 acres per 1,000 population |
| 4. State Areas | 25 acres per 1,000 population |
| 5. Federal Areas | 20 acres per 1,000 population |
| B. Natural Environment Areas | 3,000 acres per 1,000 population |
| 1. Fee Title Areas | 1,500 acres per 1,000 population |
| 2. Less than Fee Title Areas | 1,500 acres per 1,000 population |
| C. Reservoir Recreation Areas | 300 total acres per 1,000 population |
| 1. Dam and Lake Areas | 100 water acres per 1,000 population |
| 2. Recreation and Service Facilities | 200 land acres per 1,000 population |
| D. Recreational Parks (Total) | 7.4 parks per 100,000 population |
| 1. City Parks | 1 park per 20,000 urban population or per 50,000 population |
| 2. County or Metropolitan Areas | 1 park per 33,333 population |
| 3. Regional Parks | 1 park per 100,000 population |
| 4. State Parks | 1 park per 100,000 population |
| 5. Federal Parks | 1 park per 250,000 population |
| II. Recreational Activity Facilities | |
| A. Archery Ranges | 1 stand per 1,000 population |
| B. Boating Areas (Usable Water) | 1,000 acres per 6,000 population |
| 1. Car and Trailer Parking Spaces | 50 spaces per ramp or per 5,000 population |
| 2. Launching Ramps | 1 ramp per 5,000 population |
| 3. Marina, Storage and Service Facilities | 1 marina per 4 ramps or per 20,000 population |
| 4. Boat Storage Spaces | 10 spaces per 1,000 population or 200 per marina |
| C. Cabins and Motel Units | 1 unit per 10,000 population |
| D. Family Campgrounds | 1 campground or 100 sites per 20,000 population |
| 1. Comfort Stations | 1 water closet per 5 sites |
| 2. Tent Sites | 2.5 sites per 1,000 population |
| 3. Trailer Sites | 2.5 sites per 1,000 population |
| 4. Developed Campsites (Total) | 5 sites per 1,000 population |
| 5. Trailer Dumping Stations | 1 station per 50 sites |
| 6. Wilderness Campsites | 1 site per 2,000 population |
| E. Fishing Waters (Boat Fishing) | 1 pound of fish per activity occasion |
| F. Golf Courses | 36 holes per 40,000 population |
| 1. 18-hole Courses | 1 course per 20,000 population or |
| 2. 9-hole Courses | 1 course per 10,000 population |
| G. Group Camps | 6 camps per 100,000 population |
| 1. Day Camps | 1 camp per 25,000 population |
| 2. Resident Camps | 1 camp per 50,000 population or per state park |

| | |
|---|---|
| II. Recreational Activity Facilities (Continued) | |
| H. Gun Shooting Ranges | 1 stand per 5,000 population |
| I. Hunting Areas (Land and Water) | 3,000 acres per 1,000 population |
| 1. Fee Title Areas | 1,500 acres per 1,000 population |
| 2. Less than Fee Title Areas | 1,500 acres per 1,000 population |
| J. Indoor Recreation Activity Building | 1 building per 100,000 population or per park |
| K. Nature and History Interpretation | 6 facilities per 100,000 population or per park |
| 1. Amphitheaters | 1 facility per 100,000 population or per park |
| 2. Exhibits | 5 facilities per 100,000 population or per park |
| L. Picnic Grounds | 1 area (100 tables) per 14,000 population |
| 1. Comfort Stations | 6 water closets per 7,000 population or per 50 tables |
| 2. Group Shelters or Pavilions | 1 facility per 20,000 population |
| 3. Table Units | 7 tables per 1,000 population |
| M. Playgrounds (Nonurban) | 1 area per park or per 100,000 population |
| N. Parkway Roads | .5 mile per 1,000 population |
| O. Outdoor Games and Sports | 1.5 facilities per 1,000 population |
| 1. Game Fields | 1 field per 1,000 population |
| 2. Tennis Courts | 1 court per 2,000 population |
| P. Swimming Areas | 2 areas per 8,000 population |
| 1. Bathhouses | 1 water closet per 50 swimmers or per 2,500 population |
| 2. Beach Areas | 1 acre per 8,000 population |
| 3. Pools and Bathhouses | 500 square feet of water per 1,000 population |
| Q. Trails | 2.17 miles per 1,000 population |
| 1. Bicycling and Jogging Trails | 1 mile per 1,500 population |
| 2. Hiking Trails | 1 mile per 5,000 population |
| 3. Horseback Riding Trails | 1 mile per 1,000 population |
| 4. Nature Trails | 1 mile per 10,000 population or 2 miles per park or major recreation area |
| 5. Pleasure Walking Paths | 1 mile per 5,000 population |
| III. Recreational Service Facilities | |
| A. Car Parking Spaces | 300 spaces per park or per 100,000 population (excluding camping, picnic and boating areas) |
| B. Restaurants or Dining Rooms | 1 facility per park or per 100,000 population |
| C. Roads (General and Special) | 5 miles average per park or 100,000 population |
| 1. Paved (two-way) | 3 miles average per park or 100,000 population |
| 2. Paved (one-way) | .5 miles average per park or 100,000 population |
| 3. Gravel (two-way) | 1 mile average per park or 100,000 population |
| 4. Gravel (one-way) | .5 miles average per park or 100,000 population |

III. Recreational Service Facilities (Continued)

| | |
|---|---|
| D. Sanitation Facilities | 4 facilities per park or 100,000 population |
| 1. Sewage Lagoons and Systems | 1 system per park |
| 2. Sewage Treatment Systems | 2 systems per park or 100,000 population |
| 3. Utility Buildings | 2 buildings per park or 100,000 population |
| 4. Water Wells and Systems | 1 system per park or 100,000 population |
| E. Visitor Centers | 5 facilities per park or 100,000 population |
| 1. Administrative Offices | 1 building per park or 100,000 population |
| 2. Concession Buildings | 3 buildings per park or 100,000 population |
| 3. Lodge Buildings | 1 building per park of 100,000 population |

*Urban and Metropolitan Park Areas*

Urban and metropolitan park areas are primarily user-oriented with more intensive facility development, and the per capita method of land use planning is readily adaptable with proper planning for the critical values and natural resources available for park land.

*Neighborhood Parks and Playgrounds.* 2.5 acres per 1,000 population (Designed primarily to serve youths under 14 years of age).

1. Size of area – 5 acres desirable minimum.
2. Preferred location – adjacent to elementary school, located so that children do not have to cross major thoroughfares, railroads or major industrial business areas.
3. Desirable service area – one-quarter to one-half mile radius.
4. Desirable facilities – primarily user-oriented.
5. Administration – usually by the city or jointly administered by city and school.

*Community Parks and Playfields.* 2.5 acres per 1,000 population (Designed to serve all age groups).

1. Size of area – 20 acres desirable minimum.
2. Preferred location – adjacent to junior or senior high schools, center of four or five neighborhoods; should be convenient to public transportation.
3. Service area – one-quarter mile radius.
4. Desirable facilities – primarily user-oriented.
5. Administration – usually by the city or jointly administered by city and school.

*City Parks and Recreation Areas.* 5 acres per 1,000 population (Designed to serve all age groups).

1. Size of area – 100 acres desirable minimum.
2. Preferred location – depends on natural features and available vacant land; should provide a beautiful and natural setting or scenic features.
3. Service area – defined generally as serving total community recreational needs or a major section of a large city.
4. Desirable facilities – facilities for both active and passive activities; should take advantage of natural features such as lakes, woodland streams, etc., and provide a wide range of facilities for all age groups including specialized areas and facilities.
5. Administration – usually by the city.

Table 20

FACILITY UNIT CAPACITY

| Activity | | Turnover Rate | Average Number Persons Using Facility Simultaneously | Units of Facilities (Based on Design Standards) |
|---|---|---|---|---|
| (A) Archery | | 5.0 | 4 | (1 Stand) |
| (B) Bicycling: | (1) In-town | 1.0 | 1,000 | (10 Miles) |
| | (2) Countryside | 1.0 | 800 | (10 Miles) |
| (C) Boating: | (1) Motor | 1.5 | 4 | (20 Acres) |
| | (2) Nonmotor | 1.5 | 4 | (5 Acres) |
| (D) Camping: | (1) Family | 1.0 | 4 | (1 Campsite) |
| | (2) Organized Youth | 1.0 | 1 | (1 Capacity) |
| (E) Fishing: | (1) Freshwater | | Annual Activity Occasions x 1 lb. Fish | |
| | (2) Saltwater | | Unlimited | |
| (F) Golfing | | 5.6 | 54 | (1 Course) |
| (G) Hiking | | 1.0 | 1,280 | (20 Miles) |
| (H) Horseback Riding | | 1.0 | 400 | (255 Miles) |
| (J) Hunting: | (1) Deer, Turkey | 1.0 | 1 | (64 Acres) |
| | (2) Small Game | 1.0 | 1 | (10 Acres) |
| | (3) Duck, Geese | 1.0 | 2 | (8 Acres) |
| (K) Nature Walks and Study | | 4.0 | 50 | (1 Mile) |
| (L) Picnicking | | 2.0 | 5 | (1 Table) |
| (M) Pleasure Walking: | (1) In-town | 4.0 | 100 | (1 Mile) |
| | (2) Countryside | 4.0 | 50 | (1 Mile) |
| (N) Outdoor Games: | (1) Watching | | Not Discernible | |
| | (2) Participating | | Not Discernible | |
| (P) Sightseeing and Driving: | (1) Day Only | 1.5 | 3,200 | (100 Miles) |
| | (2) Overnight | Included in (P) (1) Day Sightseeing and Driving | | |
| (R) Swimming: | (1) Pool | 2.0 | 1 | (25 Sq. Ft.) |
| | (2) Lake or Stream | 2.0 | 210 | (1 Acre) |
| | (3) Gulf or Ocean | 2.0 | 210 | (1 Acre) |
| (S) Water Skiing | | Included in (C) (1) Motor Boating | | |
| (T) Vacation Travel: | (1) In-state | | Unlimited | |
| | (2) Out-of-state | | Unlimited | |

County and Metropolitan Parks. 15 acres per 1,000 population (Designed to serve all age groups).

1. Size of area – flexible criteria; should depend on available natural resources.
2. Preferred location – outside of the major urban area depending on natural features and available lands.
3. Desirable service area – one or more cities in the county or a park serving one county or metropolitan area.
4. Desirable facilities – should be a balance between resource-oriented activities and user activities.
5. Administration – usually by the county or jointly by special districts such as county and city.

*Nonurban Parks and Recreation Areas*

Regional and State parks are in a unique category because they serve as both resource areas and as parks that should provide active use facilities possessing complete vacation potential. Therefore, the per capita planning and preferred location of nonurban parks in relation to user population is not as easily applied as to urban and metropolitan parks. The per capita park acreage has been given for nonurban parks in an attempt to provide guidance and to acquire adequate land for nonurban parks for the future.

The criteria for selecting and developing a particular site for a nonurban park are flexible and should depend on the availability of a natural or manmade resource, preferably with unique scenic character or recreational potential not found elsewhere in the region or State. A large, nonurban park should have approximately 50% of the area kept in its natural state with a minimun amount of development. The facilities developed should be resource-oriented, and overall development should provide a balance of user-oriented and resource-oriented activities. Boundaries should provide adequate buffer lands to prevent encroachment, and should be such natural boundaries as rivers, streams, and/or man-made barriers such as roads and highways. Zone use planning utilizing a module or cluster concept in site development should be used because this type of planning allows the landscape to remain in its natural state for common enjoyment. In this way the land needed to provide user facilities can be developed without destroying the natural features of the site which made it desirable and attractive in the beginning for selection of a park.

No attempt has been made to establish standards for outstanding natural areas, primitive areas, or historical and cultural sites, because these areas are resource-oriented and are highly limited. The administration of these areas could be under any of the above classifications of park and recreation areas. Development should be limited to the enhancement of the area that would preserve its unique contribution to outdoor recreation. These areas should be managed to maintain an appropriate setting for sightseeing, enjoyment, and study which are commensurate with the preservation of the quality of the natural features. Historical and cultural sites should be oriented to restoration, preservation, and interpretation for sightseeing and enjoyment of the historical and cultural features of the State. Limited day use facilities may be provided when there is not a significant amount of acreage to allow for complete development and when these facilities do not detract from or interfere with the primary purpose and value of the site. Any proposed historical, archeological, or cultural site should be of significant value to the region, State or Nation to warrant development. Historically significant projects should have the approval of the State Department of Archives and History with respect to authenticity of the site.

### *Water Quality Criteria for Interstate and Coastal Waters in the State of Mississippi*

The following criteria were officially adopted for the State of Mississippi by the Mississippi Air and Water Pollution Control Commission.

*Minimum Conditions Applicable to All Waters*

1. Free from substances attributable to municipal, industrial, agricultural, or other discharges that will settle to form putrescent or otherwise objectionable sludge deposits.
2. Free from floating debris, oil, scum, and other floating materials attributable to municipal, industrial, agricultural, or other discharges in amounts sufficient to be unsightly or deleterious.
3. Free from materials attributable to municipal, industrial, agricultural, or other discharges in concentrations or combinations which are toxic or harmful to humans, animal or aquatic life
4. Free from substances attributable to municipal, industrial, agricultural, or other discharges in concentrations or combinations which are toxic or harmful to humans, animal or aquatic life
5. Municipal wastes, industrial wastes, or other wastes shall receive effective treatment or control (secondary or equivalent) in accordance with the latest practical technological advances and shall be approved by the Commission. A degree of treatment greater than secondary will be required when necessary to protect legitimate water uses.

*Recreation.* Waters in this classification are to be used for recreational purposes, including such water contact activities as swimming and water skiing. The waters shall also be suitable for use for which waters of lower quality will be satisfactory.

In assigning this classification to waters intended for water contact sports, the Commission will take into consideration the relative proximity of discharge of wastes and will recognize the potential hazards involved in locating swimming areas close to waste discharges. The Commission will not assign this classification to waters the bacterial quality of which is dependent upon adequate disinfection of waste and where the interruption of such treatment would render the waters unsafe for water contact sports.

1. Dissolved Oxygen: There shall be no oxygen-demanding substances added which will depress the C. O. content below 4.0 mg/l.
2. pH: The pH shall not be caused to vary more than 1.0 unit above or below normal pH of the waters and lower value shall be not less than 6.0 and upper value not more than 8.5.
3. Temperature: The temperature shall not be increased more than ten degrees F. (10° F.) above the natural prevailing background temperatures, nor exceed a maximum of 93° F. after reasonable mixing.
4. Bacteria: Fecal coliform is not to exceed 1,000 per 100 ml. as a monthly average value (either MPN or MF count); nor exceed this number in more than twenty percent (20%) of the samples examined during any month; nor exceed 2,400 per 100 ml. (MPN or MF count) on any day.

5. Specific Conductance: There shall be no substances added to increase the conductivity above 100 micromhos/cm for freshwater streams.
6. Dissolved Solids: There shall be no substances added to the waters to cause the dissolved solids to exceed 750 mg/l as a monthly average value, nor exceed 1,500 mg/l at any time.
7. Toxic Substances. Color, Taste, and Odor Producing Substances: There shall be no substances added, whether alone or in combination with other substances that will render the waters unsafe or unsuitable for water contact activities, or impair the use of waters requiring lesser quality.

*Fish and Wildlife.* Waters in this classification are intended for fishing, propagation of fish, aquatic life, and wildlife and any other uses requiring water of lesser quality.

1. Dissolved Oxygen: There shall be no oxygen-demanding substances added which will depress the C. O. content below 4.0 mg/l.
2. pH: The pH shall not be caused to vary more than 1.0 unit above or below the normal pH of the waters and lower value shall be not less than 6.0 and upper value not more than 8.5.
3. Temperature: The temperature shall not be increased more than ten degrees F. (10° F.) above the natural prevailing background temperatures, nor exceed a maximum of 93° F. after reasonable mixing.
4. Specific Conductance: There shall be no substances added to increase the conductivity above 1,000 micromhos/cm for freshwater streams.
5. Dissolved Solids: There shall be no substances added to the waters to cause the dissolved solids to exceed 750 mg/l as a monthly average value, nor exceed 1,500 mg/l at any time.
6. Toxic Substances: There shall be no substances added to the waters to exceed one-tenth (1/10th) of the 48-hour median tolerance limits.
7. Taste and Odor: There shall be no substance added, whether alone or in combination with other substances, that will impair the palatability of fish or unreasonably affect the esthetic value of the water.
8. Phenolic Compounds: There shall be no substance added which will cause the phenolic content to exceed 0.05 mg/l (phenol).

## *Adaptation of Recreation Facilities for the Physically Handicapped and the Elderly*

In earliest master plan studies, consideration should be given to providing maximum access for handicapped persons to all activities in which they might participate or be spectators. Physically handicapped persons to be considered include those confined to wheelchairs, those who walk with difficulty (including those with braces or crutches), those who are blind or see with difficulty, those who are deaf or hear poorly, those who are poorly coordinated or subject to palsy, and those who are infirm from age. Structures and equipment which might be used by handicapped persons should be especially adapted to such use whenever possible.

The following guidelines should be considered whenever feasible in modification and construction of outdoor recreation areas and facilities:

1. Sheltered spectator areas should be provided near activity areas which normally draw spectators.
2. Special signs and maps should be located to indicate paths and other facilities that are usable by persons with limitations.
3. Ramps should be provided for access to all facilities by those in wheelchairs.
4. Doorways, picnic tables, fireplaces, swimming facilities, drinking fountains, and telephones should be constructed or mounted in such manner as to make their use possible by handicapped persons.

In addition to these guidelines, detailed standards for facilities for the handicapped are shown in Appendix 3–B.

## NEEDS

Needs are narrowly defined as the excess of acreage or facilities required above what exists in supply. The requirements were estimated for the State and each district by multiplying the population by the standard for each area or facility. To make needs projections, population projections were developed for each district and the State (see Table 16, p. 99) for 1970, 1975, 1980, and 1985. Then percentage increases in participation for each activity were developed for Mississippi based mainly on nationwide increases expressed in *Outdoor Recreation Trends* by the Bureau of Outdoor Recreation. Using standards, carrying capacities of existing supply, increases in population, and increases in participation, area and facility needs were determined.[1]

Needs also encompass other areas of recreational concern that are as important as acreage and facilities. Personnel are required at every level to help maintain facilities and carry out activities. New legislation dealing with coordination and functions in the State government is also a need.

Some states may have an immediate need for land acquisition. Mississippi's major need is for development of existing resources. The recreational areas should be brought up to standards to accommodate use pressures. Each district of the State has several existing resources which could be made more accessible and more usable, and thereby more effective. Although development is the major need, Mississippi does also have a need for land acquisition in locations near population concentrations. In general, recreation areas have not been located with consideration of population density and use pressure.

Of the 12 districts in Mississippi, three have obviously greater quantity needs for recreational development. The Gulf Coast District, the second most populous district in the State and the most urbanized, has the greatest tourist demand, with out-of-state recreation participants coming from three large urban areas just outside of Mississippi – New Orleans, Baton Rouge, and Mobile. Also, population is projected to double from 1960 to 1985 in the Gulf Coast District. The Great Lakes District has a large amount of out-of-state use, especially from the Memphis area, as most of the large reservoirs are located in close proximity to Interstate 55 leading out of Memphis. The West Central District, which includes Jackson and Vicksburg, is the most highly populated district. The urban concentration at Jackson, especially, needs more recreation facilities.

### *Streams*

Since water-related activities generate the greatest need for facilities, land acquisition along rivers, streams, and natural lakes is needed to provide access and protection, to enhance appearance, and to enable development of facilities for maximum recreational use.

One opportunity for opening large areas of water to recreation use at relatively low cost would be to construct boat launching ramps and automobile parking areas adjacent to highway bridges over major streams where recreational boatways for small craft are feasible. Stream clearance and minor dredging would enhance this opportunity for canoeing and small boating without major expense. Construction for picnicking and campsite areas along the streams, together with trails for hiking, horseback riding, bicycling, and nature study, would add to the use and enjoyment of these areas. Parkways along these streams would offer scenic driving opportunities. Lowhead dams on some of the streams would enhance recreational opportunities by increasing the water level where the water is now too shallow or too small in quantity to afford good boating, swimming, or fishing activities. The most practical way to achieve these needs would be through official designation of major rivers as public recreational boatways. The Mississippi, Pascagoula, Pearl, Yazoo, Tombigbee, and Big Black Rivers offer the best opportunities for such waterway development.

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[1] Appendix 4–A describes needs methodology and gives detailed needs requirements.

### *Public Lakes*

Mississippi law designates all natural bodies of water over ten acres in size as public. There are approximately 50 public lakes in Mississippi large enough to support extensive water-based recreation; however, the lakes are usually surrounded by private lands which do not guarantee public access. Public access roads need to be provided to all public lakes as well as shoreline acreage for public use.

Many of the State's larger public lakes are oxbow lakes created by the continued rechanneling of the Mississippi and Yazoo Rivers. The upper ends of these lakes have been dammed to prevent the river from flowing into them, while the lower ends have been allowed to remain open for lake waters to drain out. During the dry months of summer and fall, the water level of these lakes is lowered, thereby creating undesirable or insufficient water for general recreational uses at the time when the demand is greatest. Dams and spillways need to be built to stabilize the water level of the oxbow lakes.

### *Natchez Trace*

The Natchez Trace Parkway, a major resource for outdoor recreation, is only approximately 75% complete in Mississippi. The Trace needs to be completed in Districts 2, 4, and 8. Near the Trace, facilities for travelers are needed in the form of camping and picnicking areas.

### *Metropolitan Areas*

The expanding urban centers of the State present a serious shortage of recreational opportunities in Mississippi; therefore, emphasis should be given to the location of new areas and facilities to serve the urban populations. These new areas and facilities should be located no more than one hour's driving time, and preferably less, from the homes of urban residents. Expanding metropolitan areas should maintain and protect adequate open space for conservation, beauty, and recreation, especially in rapidly developing fringe areas.

### *Trails*

There are no pleasure walking trails on inventory in Mississippi, and the supply of other types of trails is inadequate. Since trails are one of the best means of accommodating urban recreational needs, Mississippi should emphasize trail development in or near the recreation-deficient urban areas. Bicycling and pleasure walking trails, especially, should be developed in urban areas. For bicycling trails a survey could be made of low traffic streets in a city and a trail along these streets set up with marker designations.

### *Research and Evaluation*

A critical study of recreational values, especially in relation to values of the above opportunities, should be made. As a related study, a sound methodology for estimating and forecasting demand should be determined. A critical evaluation based upon an in-depth study of all State agencies involved in recreation is recommended with specific consideration to be given to interdepartmental relationships, organization, administrative functions, and policies; operating procedures, programs and goals; personnel qualifications, recreational areas and facilities, and financing. River basin studies should be continued and outdoor recreational planning and development should continue to receive major consideration in such studies.

### *Specific Potentials for Development*

Many of Mississippi's recreational needs could be met by developing some of the State's outstanding potential opportunities. These large-scale projects. described below, would serve much of Mississippi's population as well as drawing out-of-state visitation.

Gulf Islands National Seashore. The offshore islands of the Mississippi Gulf Coast collectively offer an exceptional opportunity for public outdoor recreation and must be considered as one of the State's most important potential tourist attractions. It is recommended that these islands be included in the National Park System as a portion of the Gulf Islands National Seashore as proposed by the National Park Service. If this is not accomplished, it is recommended that Federal, State, and county efforts be increased to improve for outdoor recreation the publicly-owned portions of those islands and to acquire for the public those islands or portions thereof which are now in private ownership.

Great River Road Parkway and Boatway. The Mississippi River offers one of the outstanding resources for outdoor recreation in the United States. Its natural beauty, historical significance, and deep water channel present major qualifications for the development of the River and its shoreline as a national recreational boatway and a national scenic parkway. This Plan recommends the designation and development of the Great River Road Parkway and Great River Boatway. The Parkway should follow the corridors of the eastern bank as close to the River as feasible, taking advantage of scenic vistas and historical points of interest, and should provide occasional access to the River for boating. Recreational parks should be located advantageously along the Parkway affording opportunities for picnicking, camping, sightseeing, hiking, and park interpretation. A monument commemorating the role of the Mississippi River in the development of the Nation might be constructed near one of Mississippi's river cities and administered by the National Park Service as a major interpretive center.

Development Around the Ross Barnett Reservoir. With its approximately 30,000 acres of water, 6,000 acres of wetland, and 12,000 acres of land, Ross Barnett Reservoir offers an excellent potential for water-based and other outdoor recreational activities at the edge of the State's largest urban area. The reservoir should continue to be developed intensively and extensively by the Pearl River Valley Water Management District as a model recreation area for the State. Numerous well-developed facilities for tent and trailer camping, picnicking, group camping, swimming, and history and nature interpretation should be provided as soon as possible according to a well-defined comprehensive plan for total development of recreational resources.

Recreational Boatway Development. Several exceptional opportunities are present for recreational boatway development along major streams in Mississippi, particularly the Pearl, Pascagoula, Tombigbee, and Yazoo. These were formerly important waterways for trading and transportation, but in recent years have been rendered almost useless as navigational waterways because of extensive sedimentation. Most of the State's streams have retained stretches of natural beauty. With channel improvements, primarily removing of snags and dredging to a minimum of three feet and the building of lowhead dams where necessary, these streams could become important waterways for recreational boating, water skiing, and fishing. These opportunities appear especially attractive because of the possibility of economically providing access to large reaches of water navigable to small craft where major highway bridges now span these streams. Such opportunities will require the construction of boat launching ramps and automobile parking facilities. After these basic improvements are made, other facilities should be added for a variety of recreational opportunities, including tent and trailer camping, picnicking areas, group camp facilities, and trails for hiking, bicycling, and horseback riding. Recreational parkways, as elongated parks, should be eventually developed for pleasure driving and sightseeing along scenic stretches of these streams as well as to provide greater accessibility to the streams.

### *District Needs*

Specific district needs cover a wide range of outdoor recreational requirements. A brief description of pertinent needs for each of the 12 districts is given below:

*District 1, Great Lakes*

1. Major facility development is needed at Arkabutla Reservoir and Horne Lake.
2. Additional facilities should be developed in Holly Springs National Forest and Wall Doxey State Park.
3. New State Parks are needed at Arkabutla.
4. Chewalla Lake needs an all-weather access road.
5. Administrant measures for recreation should be made on the four reservoirs which are classified as flood control projects to correct hardships on recreationists seeking to use facilities which are water-oriented, particularly boat ramps, when at certain periods of the year, the water level is lowered to a severe degree.

6. Plans must be developed to protect or relocate major facilities of John W. Kyle State Park that will become inundated when the water level is elevated as planned for Sardis Reservoir.
7. The District needs additional natural environment and city acreage and facilities for camping, swimming, archery, trails, and interpretive exhibits.

*District 2, North Appalachia*

1. Facilities expansion is needed at J. P. Coleman and Tishomingo State Parks.
2. Completion of and additional recreation facilities for travelers are needed near the Natchez Trace.
3. Yellow Creek Watershed Authority needs more adequate funds to provide recreation facilities in the District.
4. Development, planning and improvement of facilities of Tishomingo State Park are needed to provide for the increased numbers of visitors to the Park when the Natchez Trace bisects the Park.
5. The District needs natural environment, regional, and city acreage.

*District 3, North Delta*

1. Better access, adjoining public land acquisition, and major facility development are needed at existing major lakes – Flower, Tunica, DeSoto, Moon, and Stovall.
2. There is much private land under lease agreement with hunting clubs, but there are no public game management areas within the District. Opportunities for public hunting are therefore poor, and need to be developed.
3. Public facilities for camping and picnicking are scarce. There is only one public area for each and the six picnic grounds in the District provide only 0.25 table units per 1,000 population, which is the lowest figure for any district in the State. Camping and picnicking facilities are urgently needed.
4. Park and recreation area acreage is low and needs to be expanded.
5. The District needs Federal, State, regional, and county acreage and facilities for boating, camping, picnicking, and swimming.

*District 4, Central Appalachia*

1. New water developments are needed for all types of water-related recreation.
2. The District needs natural environment acreage.

*District 5, South Delta*

1. Major recreation sites should be developed at Lakes Albemarle, Beulah, Chotard, Ferguson, Lee, Washington, and Whittington.
2. Facilities should be developed at Archer Island and other areas along the Mississippi River.
3. Water areas should be developed and improved for recreational use.
4. Development plans should be carried through at Warfield Point for a major park on Lake Ferguson.
5. The District needs facilities for camping, swimming, picnicking, trails, archery, and skeet shooting.

*District 6, North Central*

1. An access road is needed into Holmes County State Park from Interstate Highway 55.
2. Practically all development in this district is under nonpublic ownership; therefore, the District needs public county, regional, State, and Federal acreage and facilities for golfing, boating, archery, and skeet shooting.

*District 7, South Appalachia*

1. Usable water for boating is critical with only 490 acres, the lowest total in the State. Water-based recreation should be provided by developing existing water areas and building new man-made lakes.
2. The Tombigbee River should be established as a public recreational waterway.
3. Improvements are needed on the Noxubee River for recreation facilities.
4. Additional development is needed at Nanih Waiya State Historical Park.
5. An access road and general development are needed at Bluff Lake in the Noxubee Wildlife Refuge for general outdoor recreation (camping, picnicking, trails, etc.).
6. The District needs State and city acreage and facilities for boating, fishing, picnicking, and swimming.

*District 8, West Central*

1. A major recreation complex with full facilities for participation in outdoor recreation is needed near the Natchez Trace Parkway and the Ross Barnett Reservoir.
2. Because of the strategic location of many famous historical attractions in beautiful settings in the southwestern section of the District, there is a need for creation of a major historical recreation complex. The complex perhaps should be built around Grand Gulf State Military Park, City of Port Gibson, ruins of Windsor Castle, ghost town of Rodney, Bruinsburg River Ferry, General Grant's inland march route, the Sunken Road, Port Gibson Battlefield Site, Pine Ridge Presbyterian Church, and the Natchez Trace Parkway.
3. Recreational site development is desirable in the Scutcheloe Hills, and along the Strong River and Little Copiah Creek.
4. Municipal swimming pools in Jackson are closed and beach acreage in the District is extremely low. Public swimming facilities are urgently needed, especially for the urban population.
5. The District needs city, county, regional, and State acreage and facilities for camping, swimming, trails, and hunting.

*District 9, East Central*

1. Expansion and improvement of facilities at Clarkco and Roosevelt State Parks are needed.
2. Facilities should be expanded at State Game and Fish Commission lakes.
3. There are only 6,302 acres of usable water for boating and no marinas in the District at this time. Water developments are needed, especially to serve the growing urban population.
4. The District needs county and regional acreage and facilities for fishing, boating, hiking, playgrounds, game fields, tennis courts, and trails.

*District 10, Southwest*

1. Major water projects should be developed in the District.
2. Acquisition of lands and development of interpretive facilities are needed at important historical and natural sites.
3. Facilities are needed for more and varied activities at the State-administered fishing lakes.
4. Facilities should be expanded at Percy Quin State Park.
5. To help in distributing the water acreage more equitably over the District, reservoirs should be developed on tributaries of the Pearl River.
6. The District needs county and regional acreage and facilities for boating, swimming, and trails.

*District 11, Southern*

1. Throughout the Pascagoula River Basin water recreational projects need to be developed.
2. More reservoirs are also needed in the District to help provide water for recreation.
3. The Pascagoula River should be made more accessible by construction of boat ramps and parking areas at highway bridges.
4. Additional facilities including a lodge and developed campground are needed at Paul B. Johnson State Park.
5. Additional facilities are needed at DeSoto National Forest and at State-administered fishing lakes.
6. The District needs city, county, regional, and Federal acreage and facilities for fishing, boating, camping, archery, skeet shooting, trails, and interpretive exhibits.

*District 12, Gulf Coast*

1. Additional freshwater recreational opportunities are badly needed in the District.
2. Expansion and improvement of lands and facilities at Magnolia State Park are needed.
3. Only 200 acres of State park land (Magnolia) exist along the entire Mississippi Gulf Coast. Additional State Parks are needed to accommodate the dense population and the influx of out-of-state visitors into the District.
4. Additional facilities are needed in DeSoto National Forest.
5. U. S. Highway 90 should be designated as a parkway and four-laned its entire length along the Gulf Coast and additional wayside parks built with public facilities such as bathhouses, shelters, drinking fountains, or sanitary facilities on the State-owned beach. (The section of the highway in Harrison County is already designated as Harrison County Parkway and is a four-lane facility throughout its length.)
6. The only access to offshore islands is by boat. The islands should be made more accessible and available for public use.
7. Fort Massachusetts on Ship Island should be preserved and restored.
8. Corrective measures are needed to prevent further pollution of the Gulf by raw effluent and storm sewers which are emptied directly onto the beach and into the Mississippi Sound.
9. Measures by the State should be taken to stop encroachment on the waterfront by commercial interests which are taking more beach acreage out of public use each year.

10. The district needs city, county, regional, and Federal acreage and facilities for fishing, boating, camping, archery, skeet shooting, trails, and interpretive exhibits.

*Priority Needs of Facilities Based on Anticipated Demand*

Table 21 below shows the activities with the highest anticipated demand in the future and the facilities that will be needed to enable participation. Needs for these facilities will increase at a fast rate along with the participation increase.

Table 21

ACTIVITIES WITH THE GREATEST ANTICIPATED INCREASE IN ACTIVITY OCCASIONS 1970–1985

(Over 10 Million)

| | Activity | Facility Needed |
|---|---|---|
| 1. | Boating | Boating acres |
| 2. | Outdoor Games (watching) | — |
| 3. | Sightseeing and Driving (day only) | — |
| 4. | Outdoor Games (participation) | Outdoor game fields<br>Tennis Courts<br>Playgrounds |
| 5. | Hunting (small game) | Hunting acres |
| 6. | Fishing (freshwater) | Fishing acres |
| 7. | Golf | Golf holes |
| 8. | Swimming (pools) | Swimming pools |
| 9. | Vacation Travel (out-of-state) | — |
| 10. | Swimming (lake or streams) | — |
| 11. | Horseback Riding | Trails |
| 12. | Archery | Archery stands |
| 13. | Pleasure Walking (countryside) | Trails |

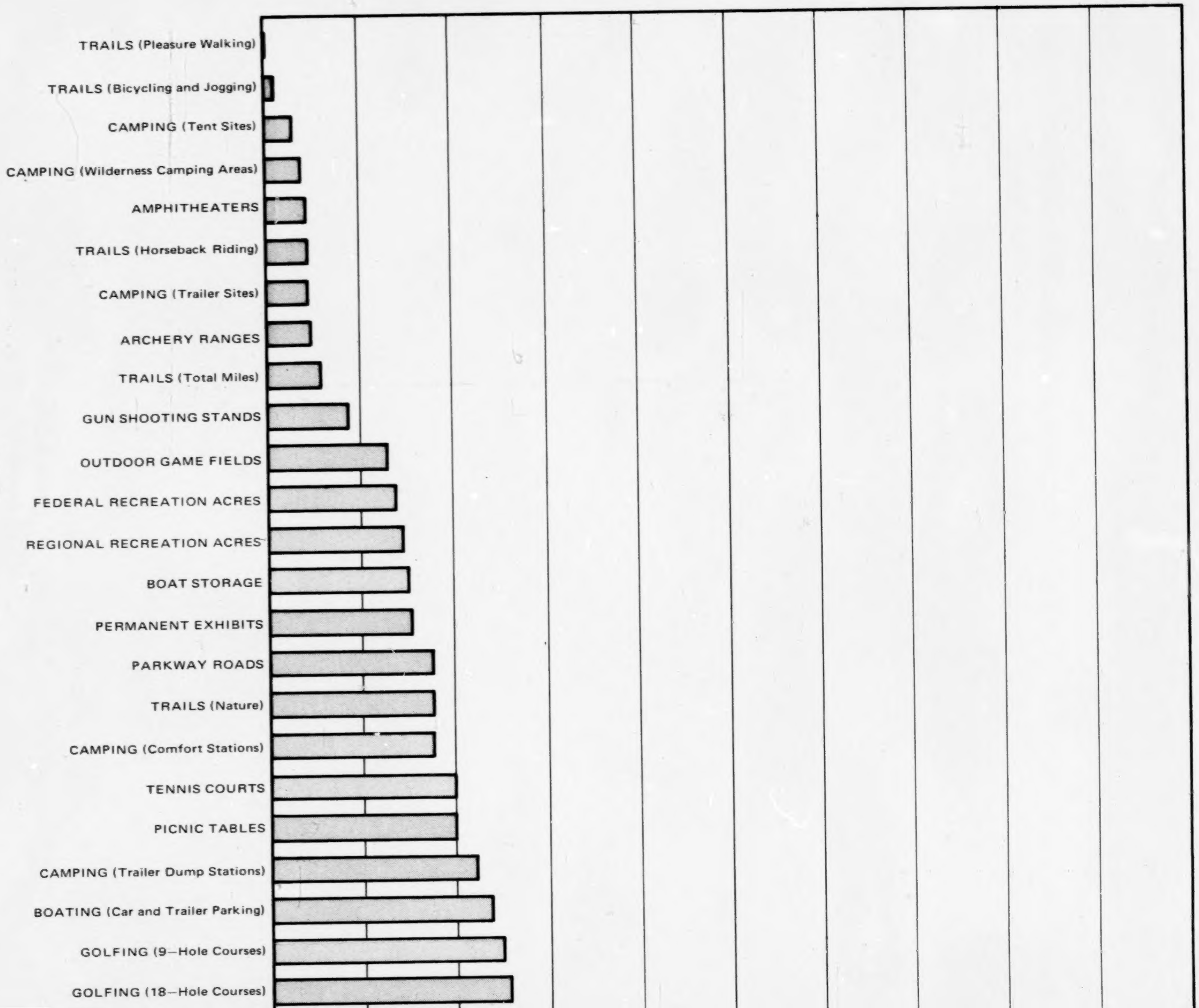
*Needs and the Existing Supply*

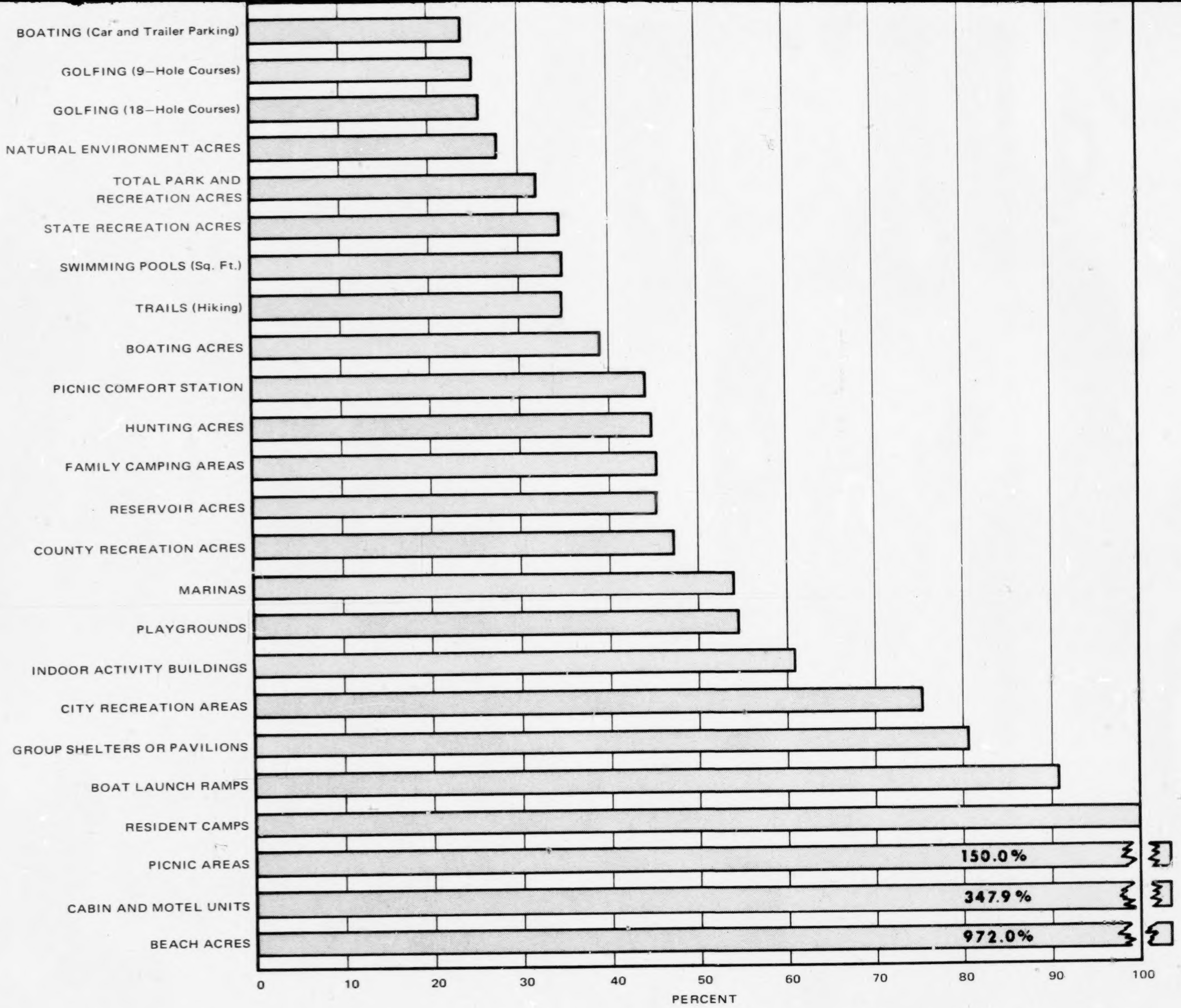
State. Chart 26 shows the percentage of need satisfied by existing supply in Mississippi for various acreage and facility categories. Needs were determined from standards developed for Mississippi, and the supply is based on the inventory conducted for this report.

Acreage figures for many of the recreation categories show a supply of between 25% to 50% of the indicated needs based on standards for 1968. Only three acreage categories fall outside of this range. (Federal and regional acres are less than 25% and city acres are above 50%.)

## Chart 26

## PERCENT NEED SATISFIED BY SUPPLY – 1968 – MISSISSIPPI





SOURCE: Mississippi Recreation Survey, 1967.

Mississippi Research and Development Center

Two categories which stand out in the very low percentage range on the chart are camping facilities and trails mileage. Other facilities in the low percentage category include development items such as tennis courts, picnic tables, exhibits, archery ranges, and amphitheaters.

One would assume that facilities in the bottom half of the chart are of a less critical nature than those at the top. However, many of the facilities are unevenly concentrated in a few districts.

1. Over one-half of the cabin and motel units are in the Great Lakes District. Quality of cabins is poor overall.
2. Almost 90% of the beach acreage is along the Gulf Coast.
3. Two-thirds of the marinas are in the Gulf Coast District.
4. One-fourth of the boat launch ramps are in the Gulf Coast District.
5. Over one-half of the group shelters or pavilions are in two districts – Great Lakes and West Central.

Districts. The following charts show for each district the amount of need satisfied by the existing 1968 supply for selected facilities. The needs for 1970, 1975, 1980, and 1985 are also shown to give an indication of additional acreage or facility needs. These charts also readily indicate districts in the State that have the greatest quantity needs and where the supplies of certain areas and facilities are concentrated.

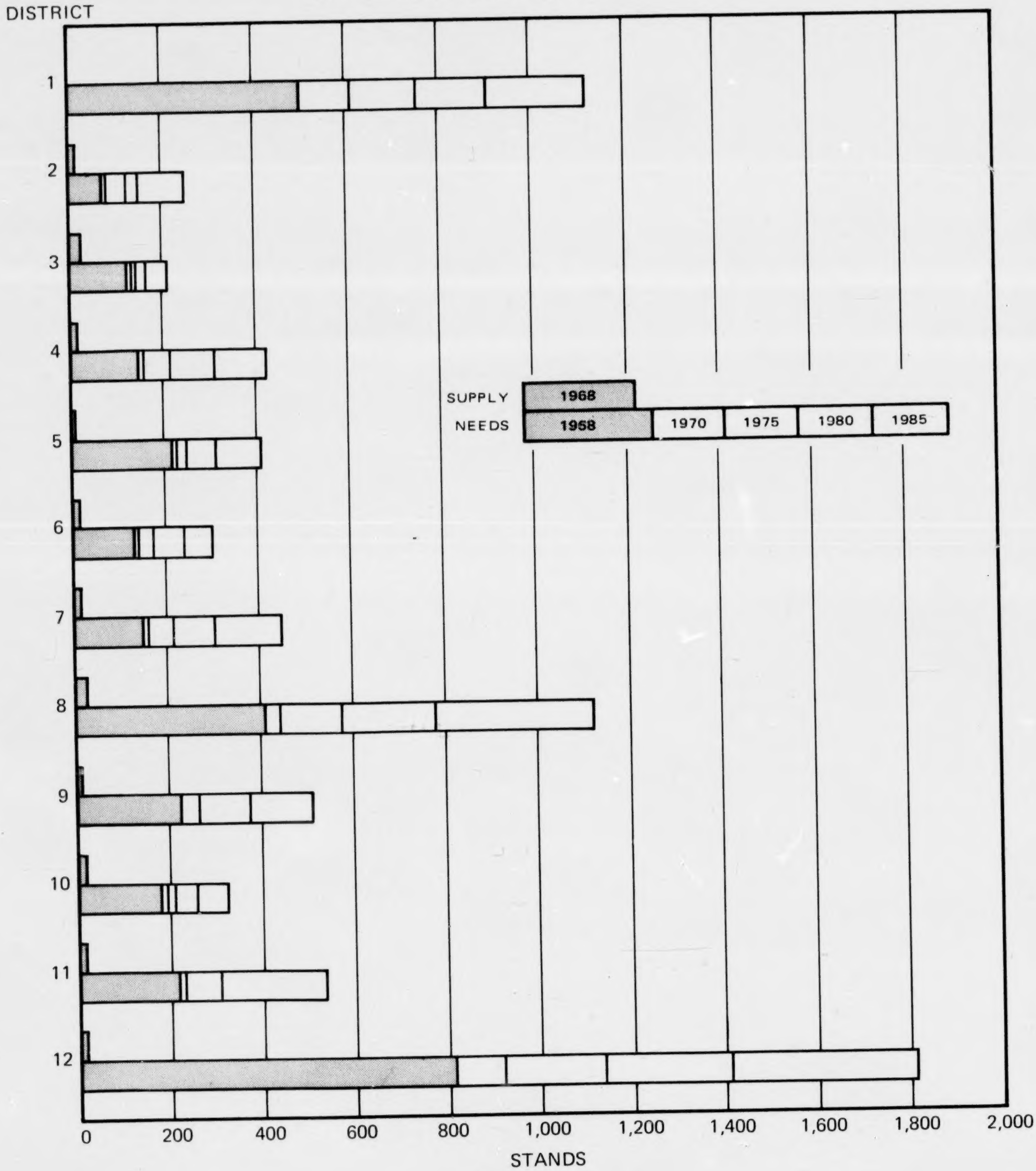
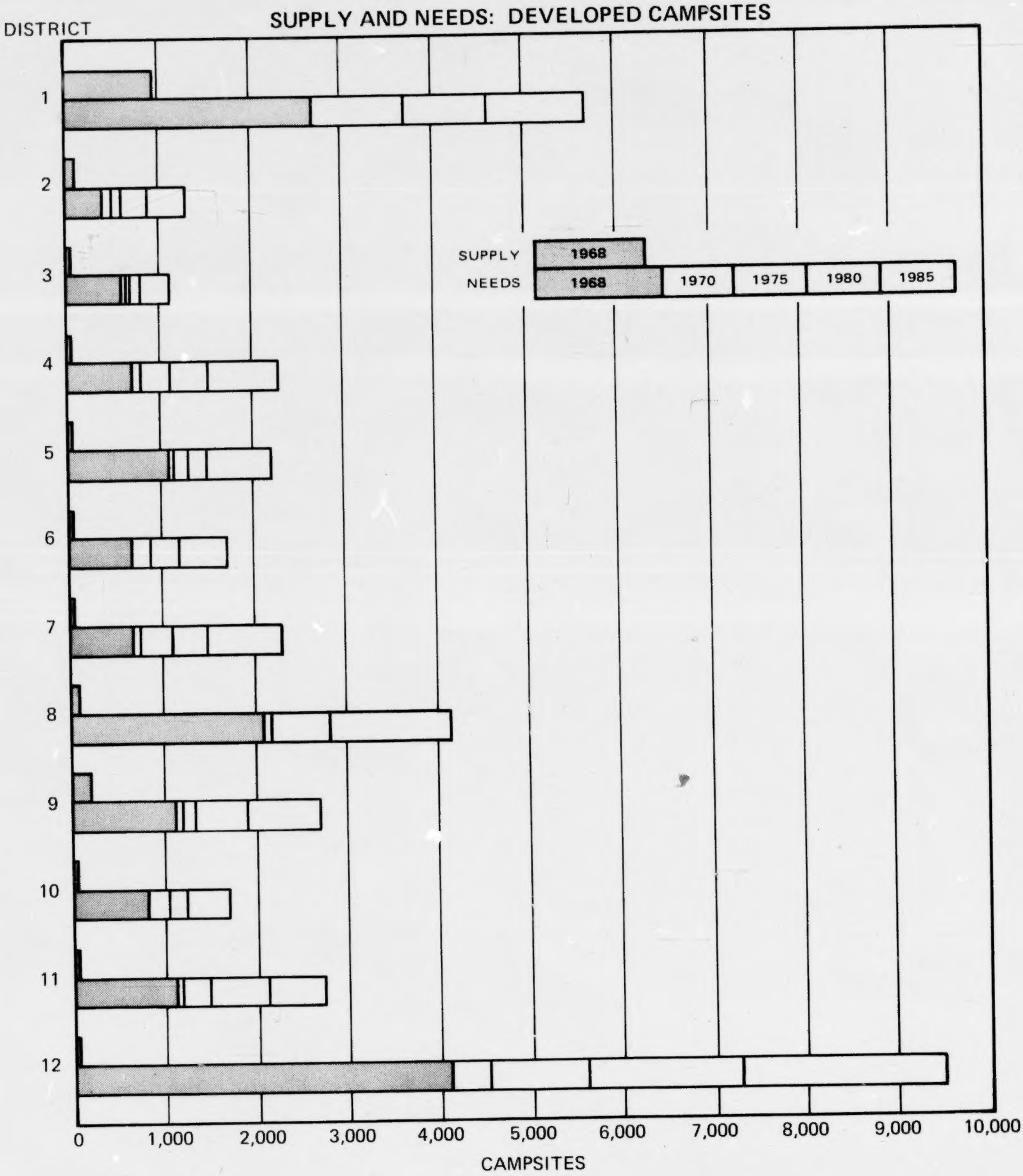


Chart 27
SUPPLY AND NEEDS: ARCHERY STANDS

NOTE: On some bars the difference between 1968 and 1970 needs is too small to be shown graphically.

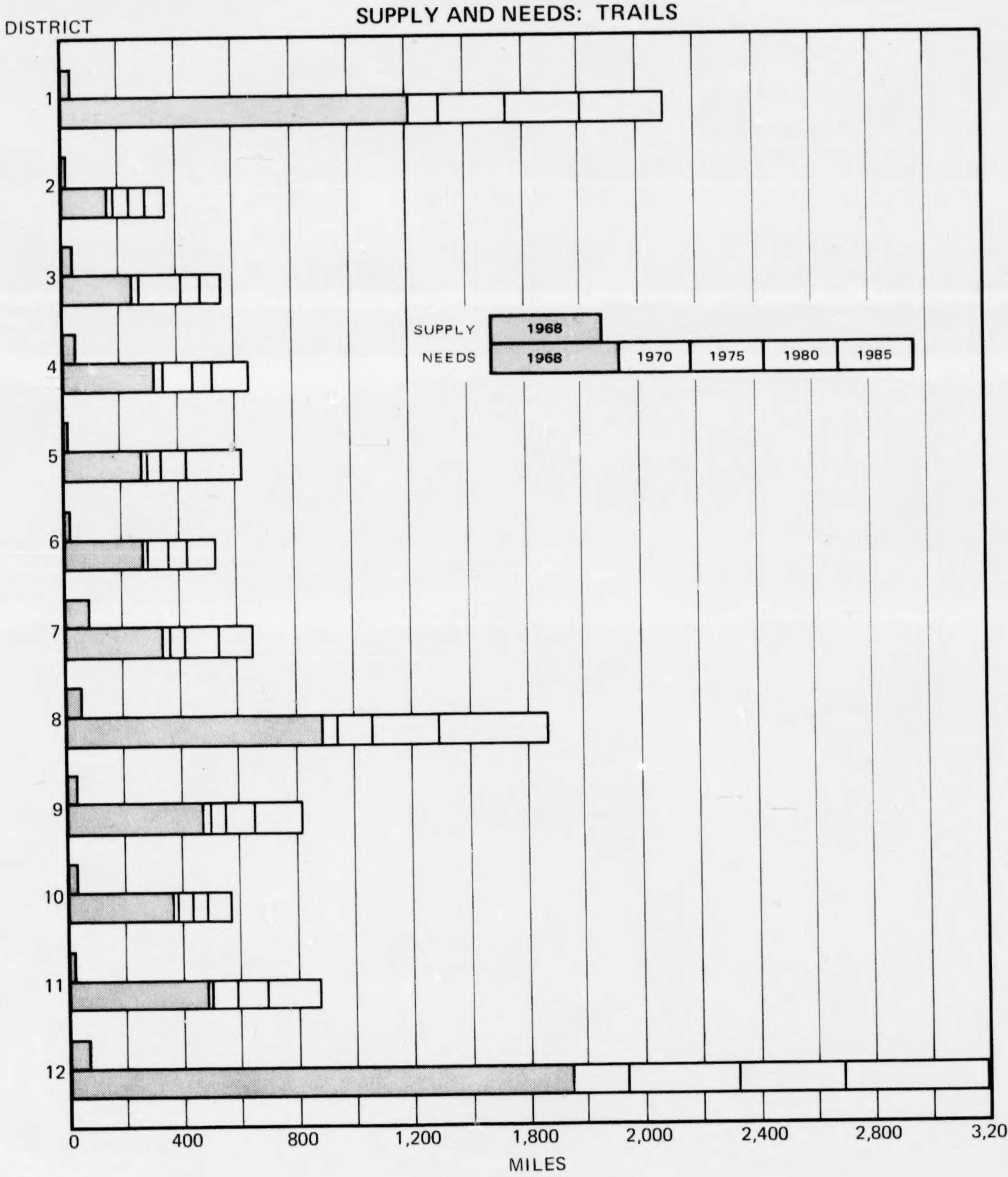
## Chart 28
## SUPPLY AND NEEDS: DEVELOPED CAMPSITES



NOTE: On some bars the difference between 1968 and 1970 needs is too small to be shown graphically.

## Chart 29

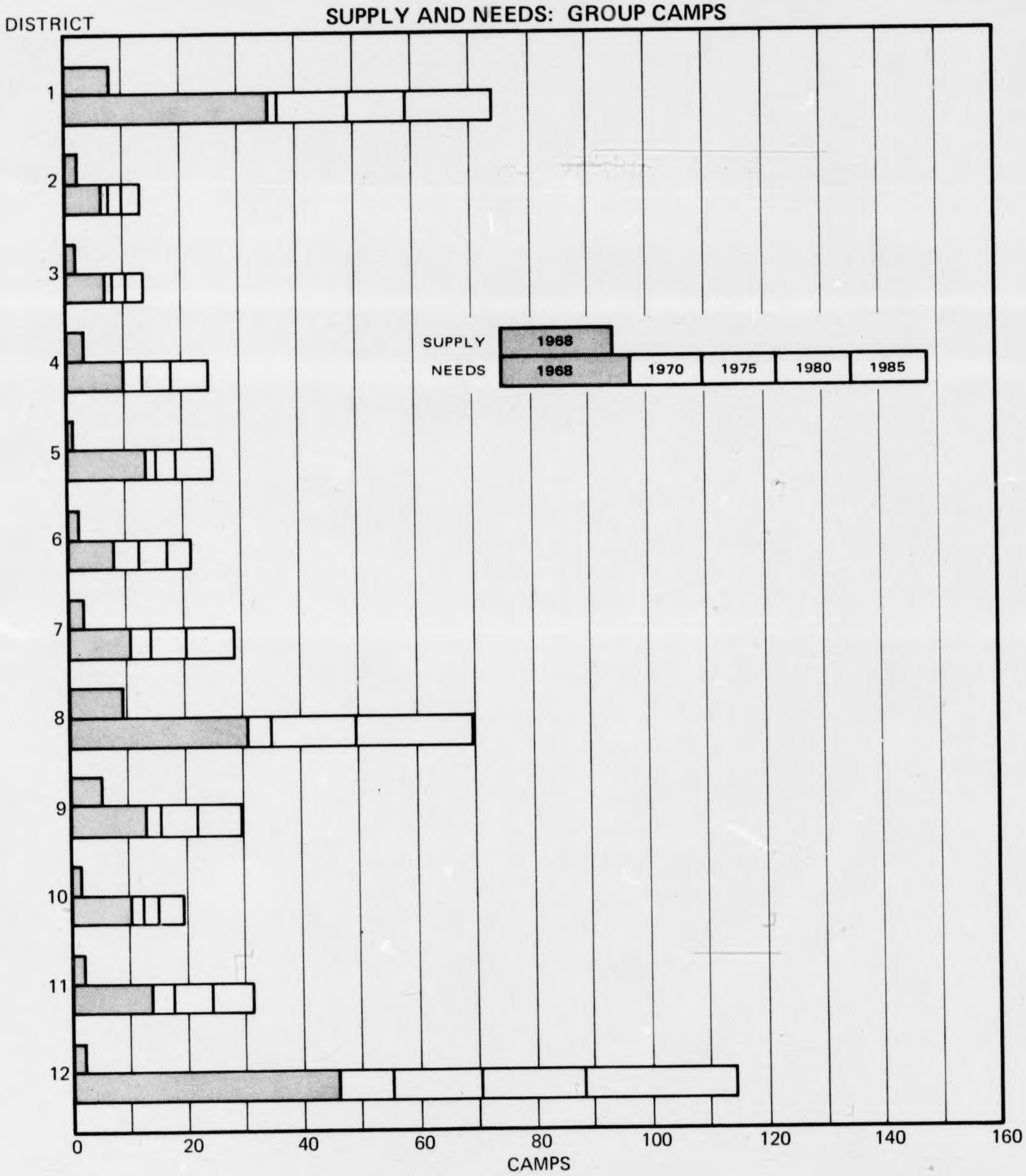
## SUPPLY AND NEEDS: TRAILS



150

## Chart 30

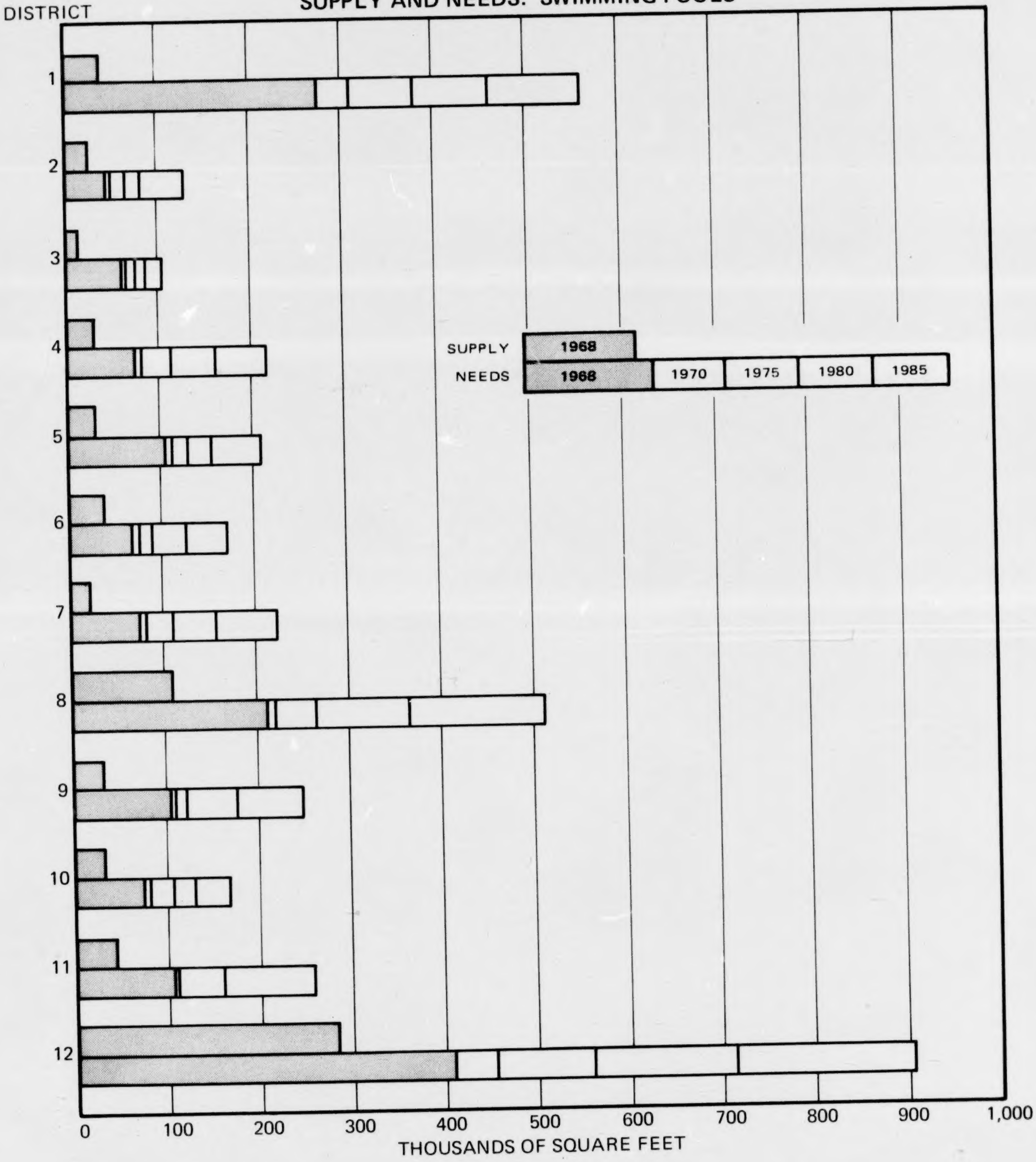
## SUPPLY AND NEEDS: GROUP CAMPS



NOTE: On some bars the difference between 1968 and 1970 needs is too small to be shown graphically.

## Chart 31

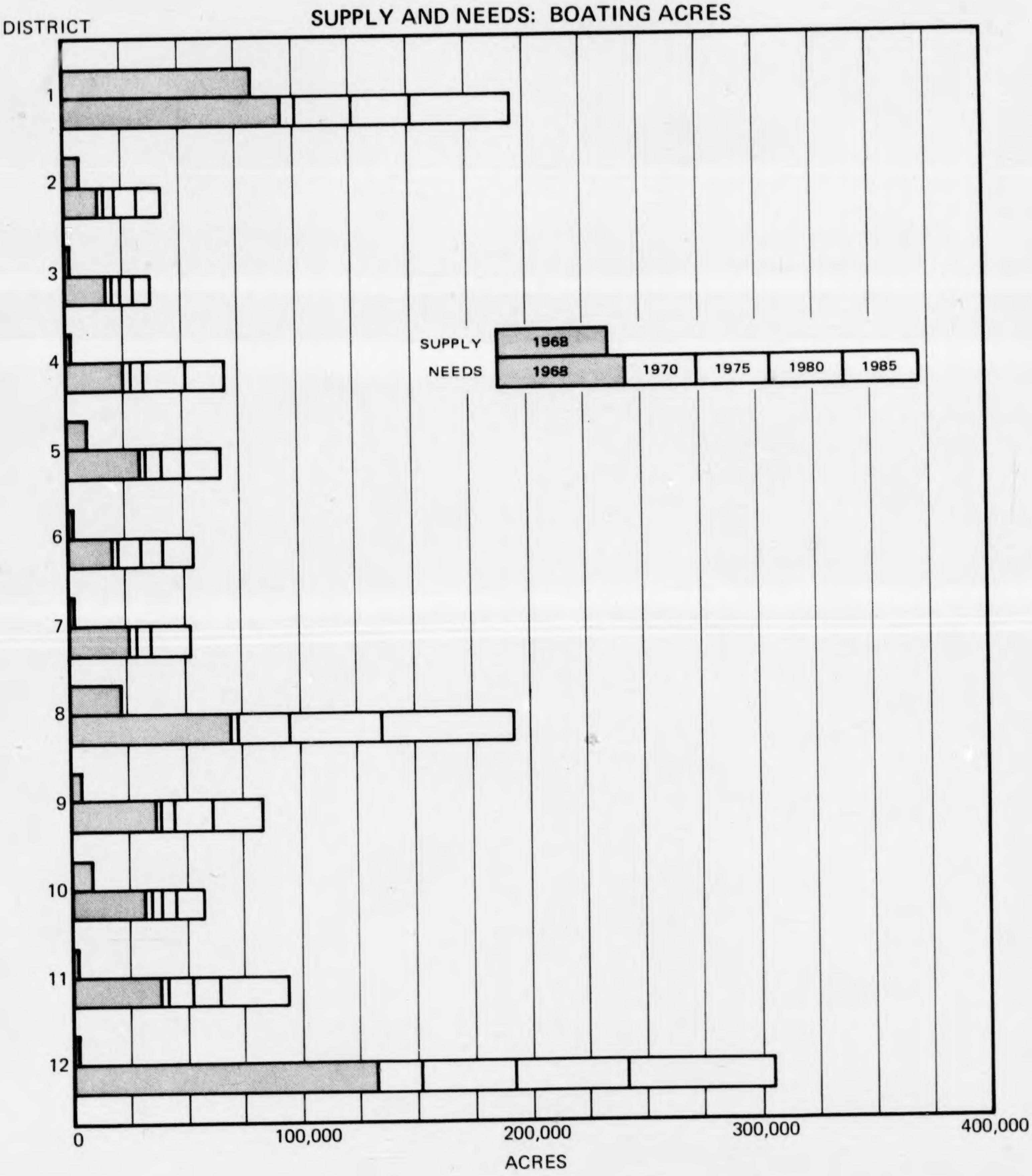
### SUPPLY AND NEEDS: SWIMMING POOLS



NOTE: On some bars the difference between 1968 and 1970 needs is too small to be shown graphically.

## Chart 32

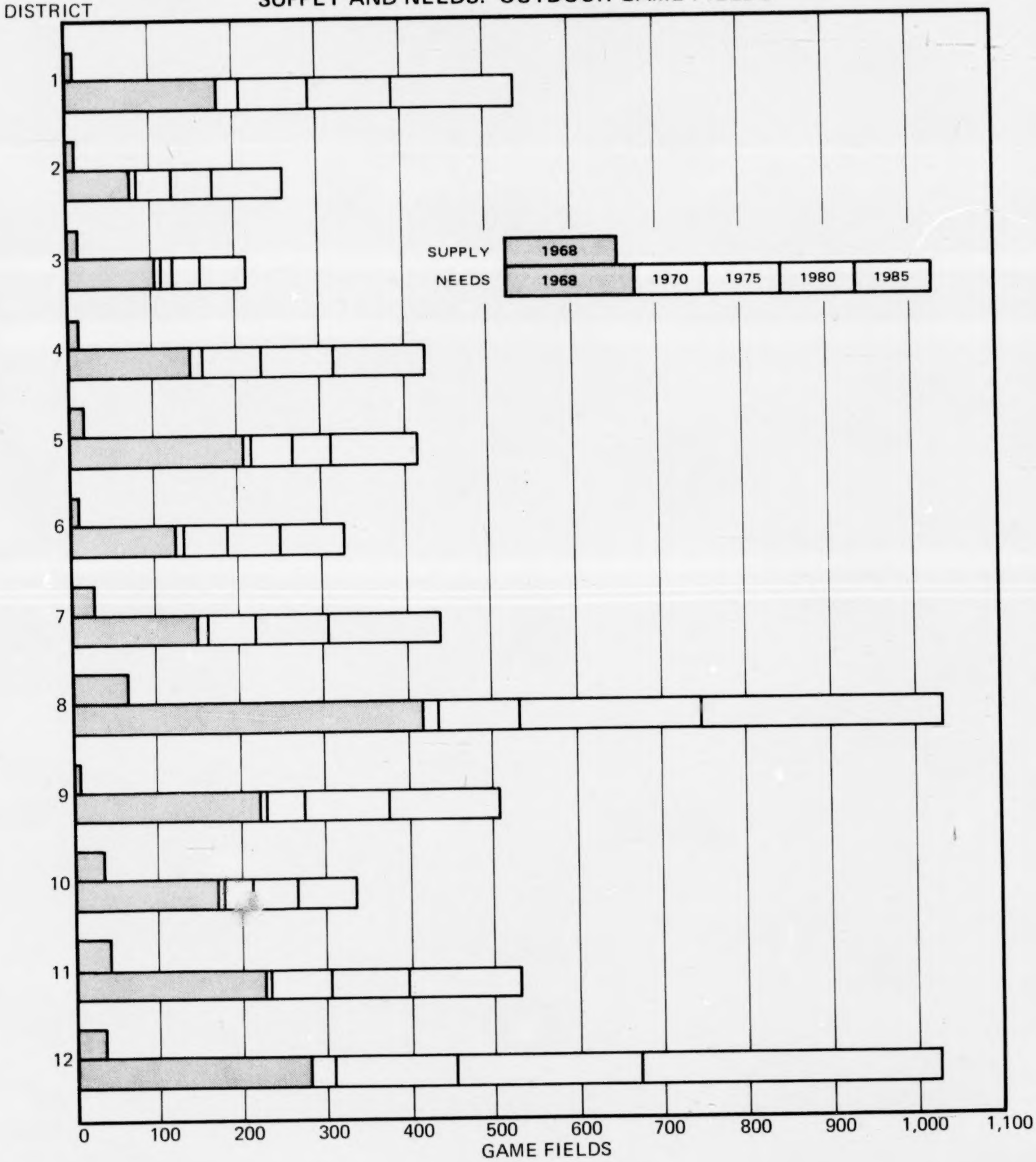
## SUPPLY AND NEEDS: BOATING ACRES



NOTE: On some bars the difference between 1968 and 1970 needs is too small to be shown graphically.

## Chart 33

## SUPPLY AND NEEDS: OUTDOOR GAME FIELDS



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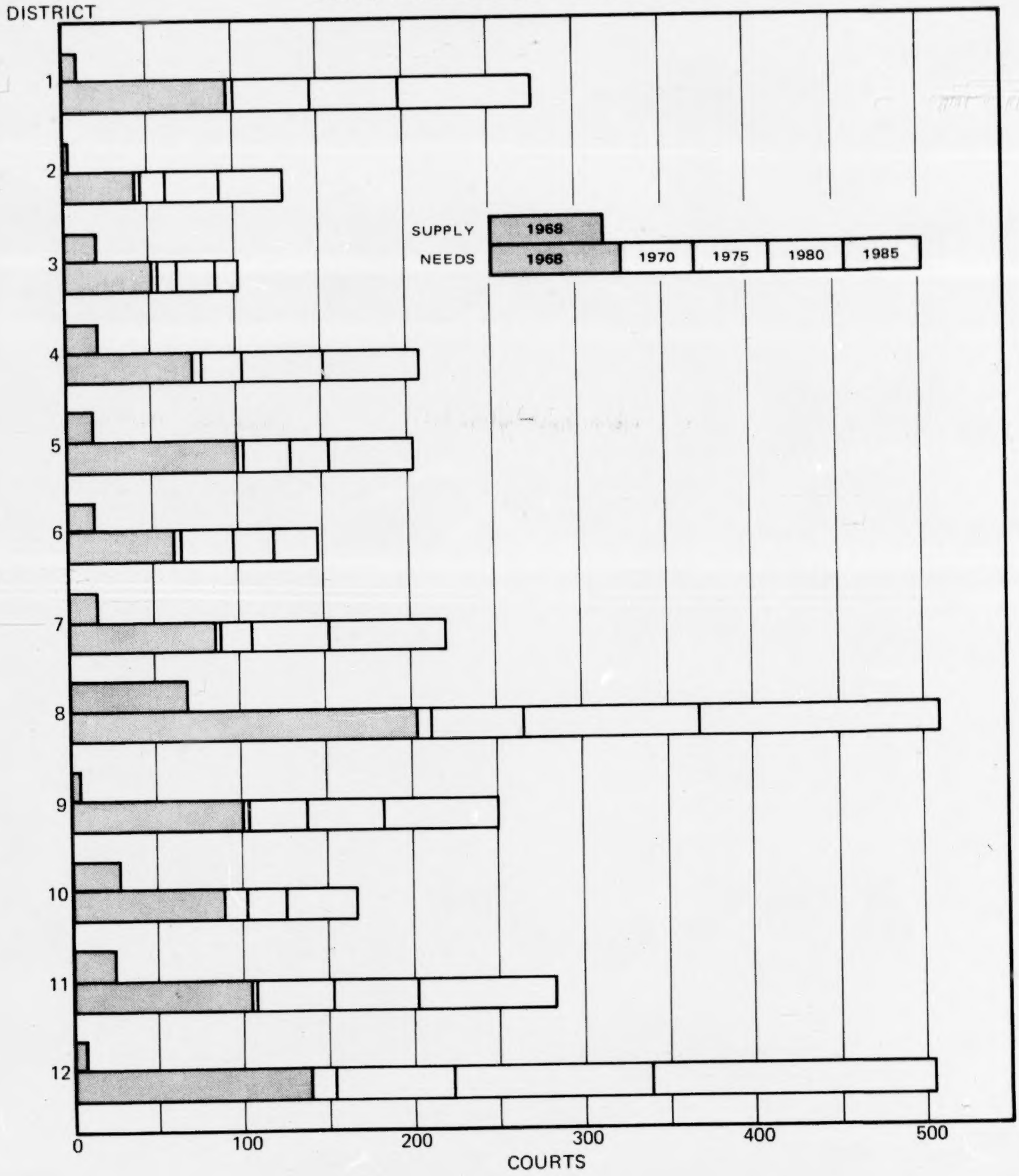
Mississippi Research and Development Center

## Chart 34

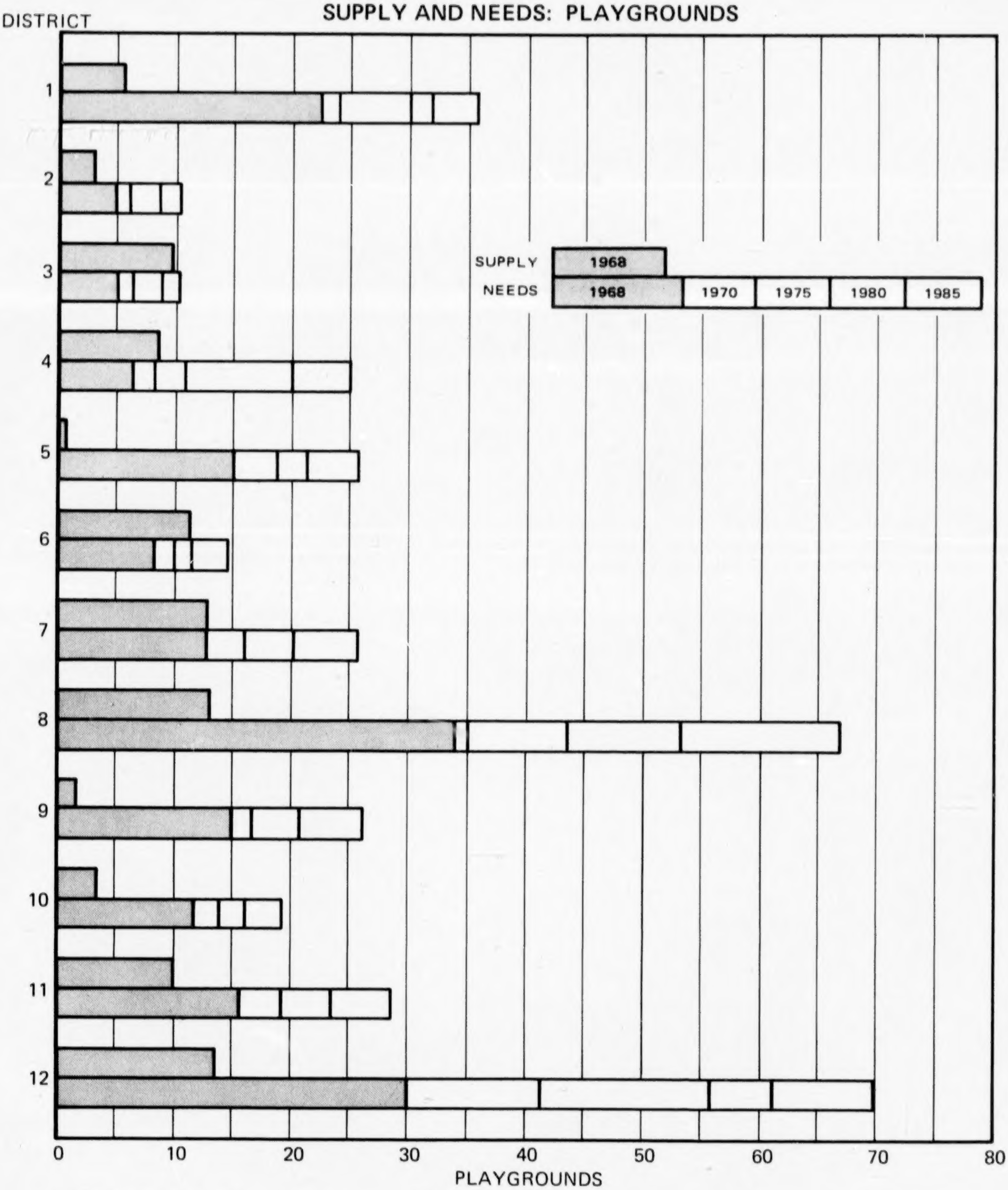
## SUPPLY AND NEEDS: TENNIS COURTS



NOTE: On some bars the difference between 1968 and 1970 needs is too small to be shown graphically.

155

## Chart 35
## SUPPLY AND NEEDS: PLAYGROUNDS



NOTE: On some bars the difference between 1968 and 1970 needs is too small to be shown graphically.

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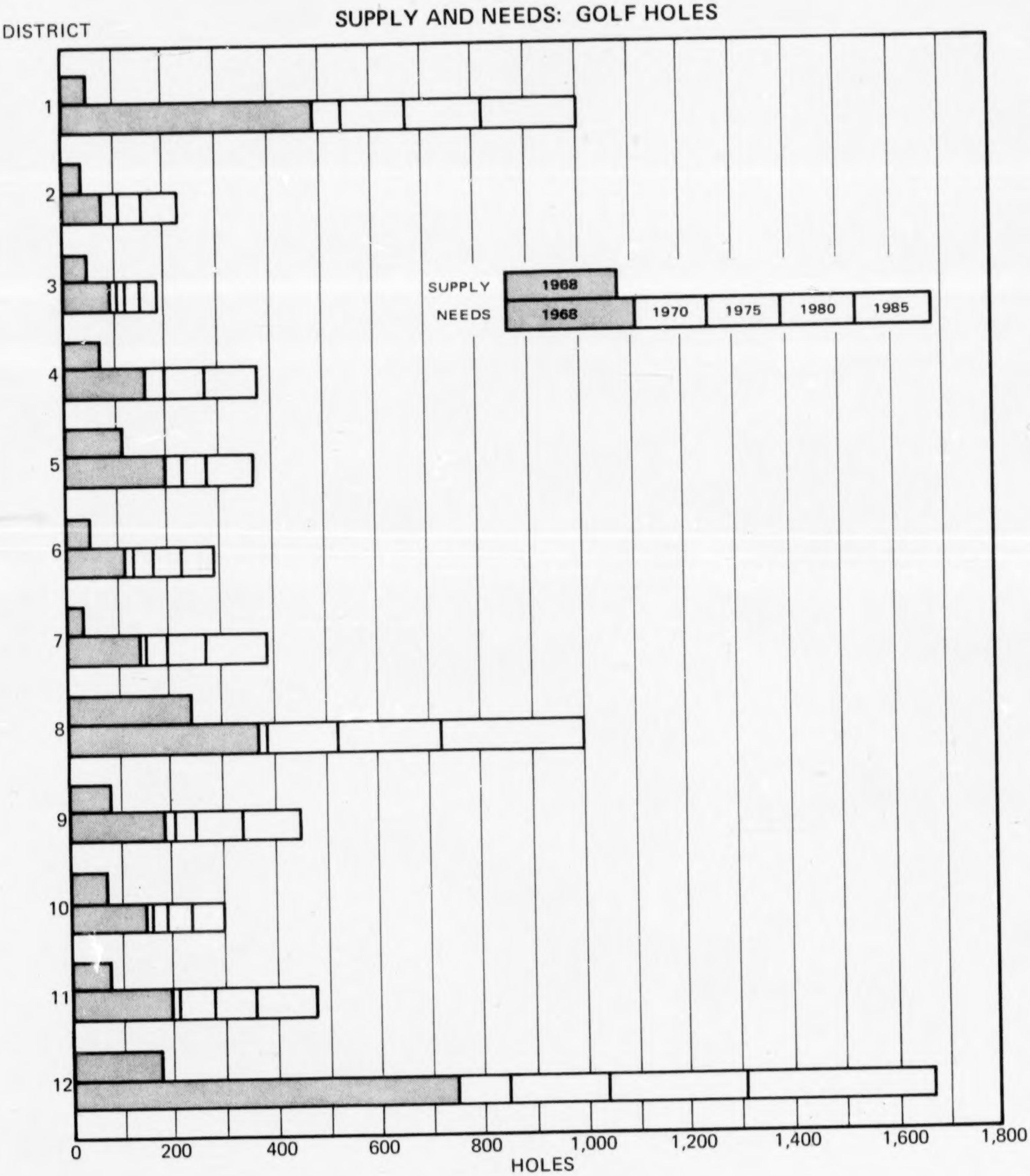
## Chart 36

## SUPPLY AND NEEDS: GOLF HOLES



NOTE: On some bars the difference between 1968 and 1970 needs is too small to be shown graphically.

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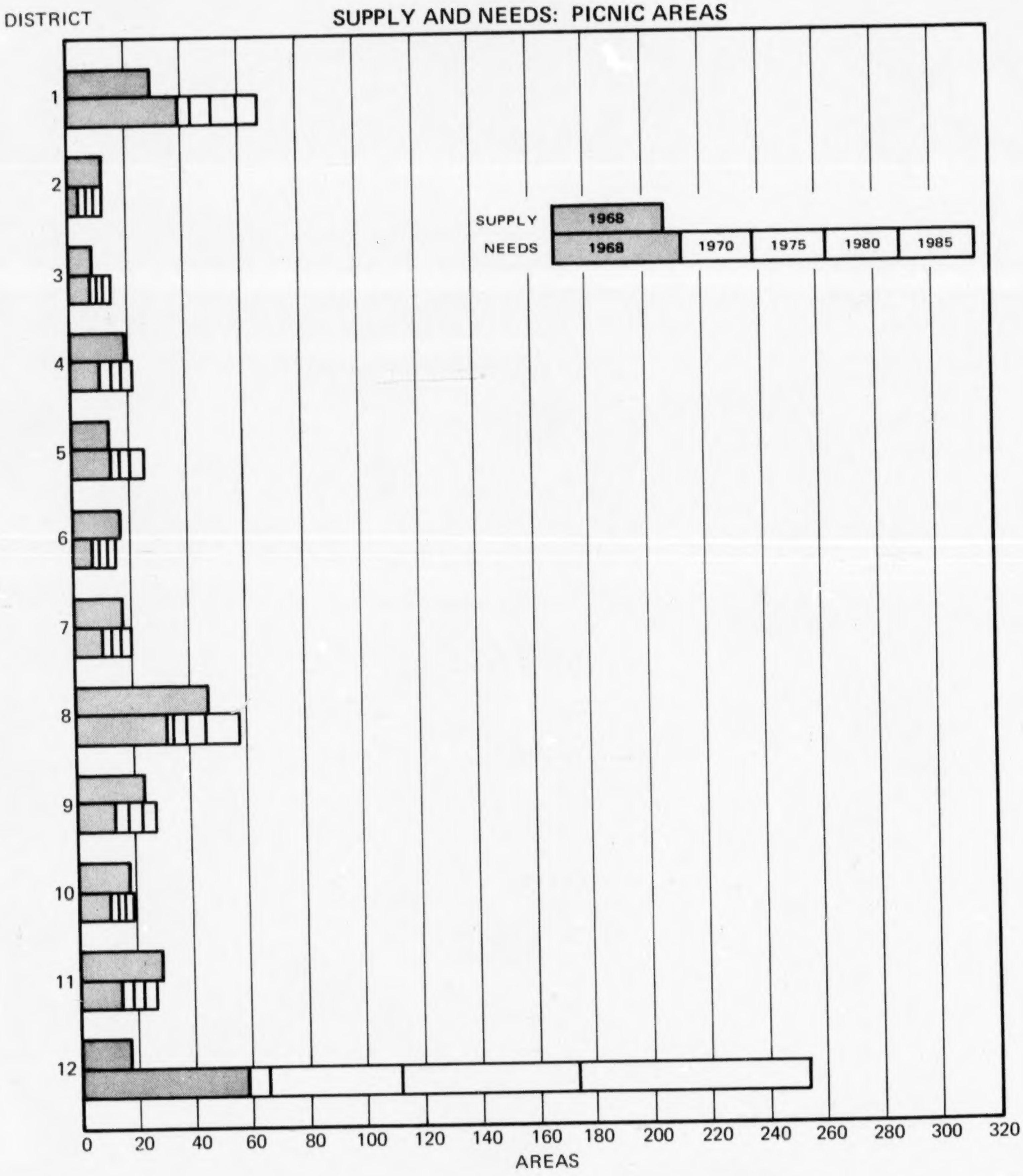
## Chart 37

## SUPPLY AND NEEDS: PICNIC AREAS



NOTE: On some bars the difference between 1968 and 1970 needs is too small to be shown graphically.

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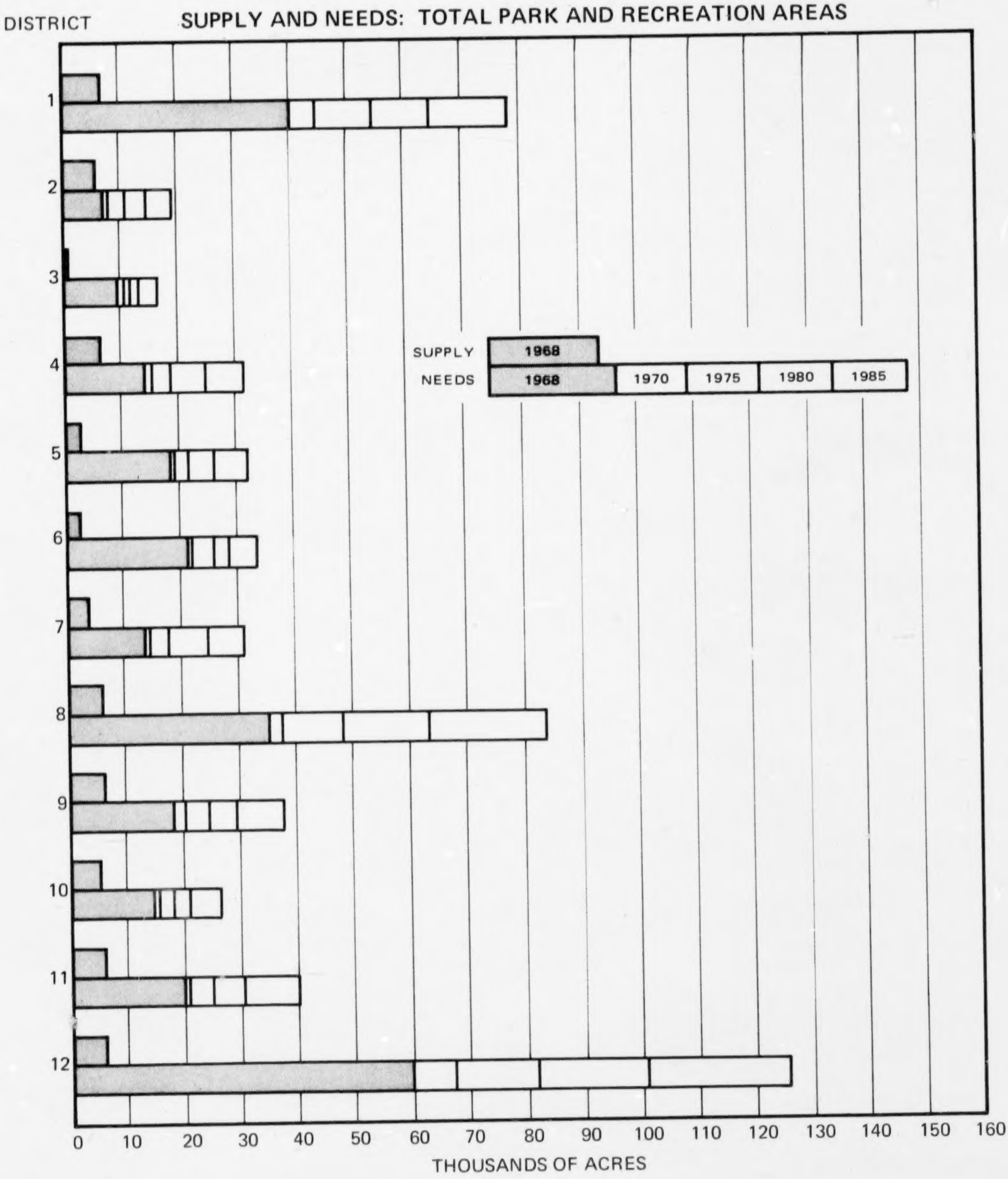
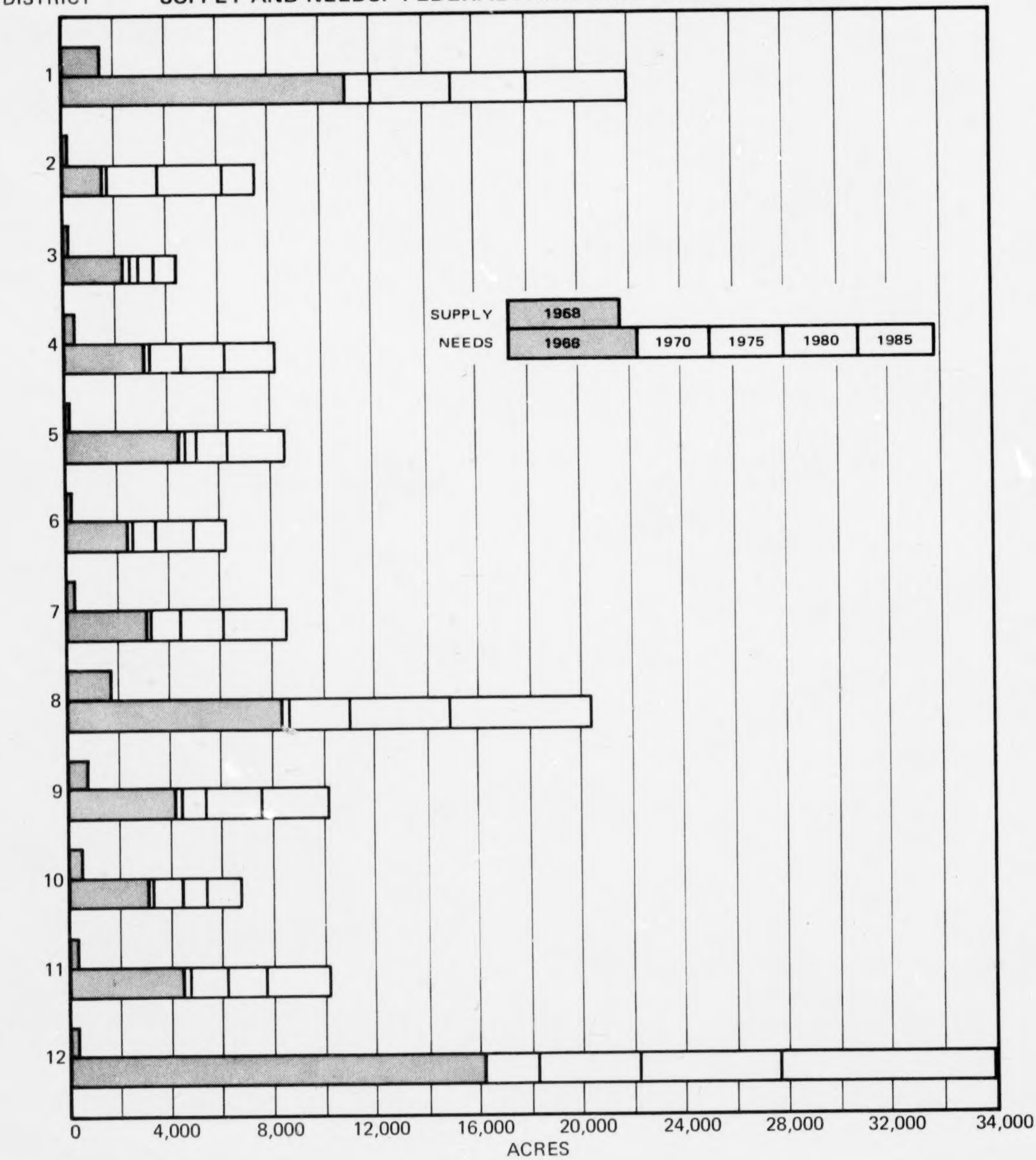
Chart 38

SUPPLY AND NEEDS: TOTAL PARK AND RECREATION AREAS



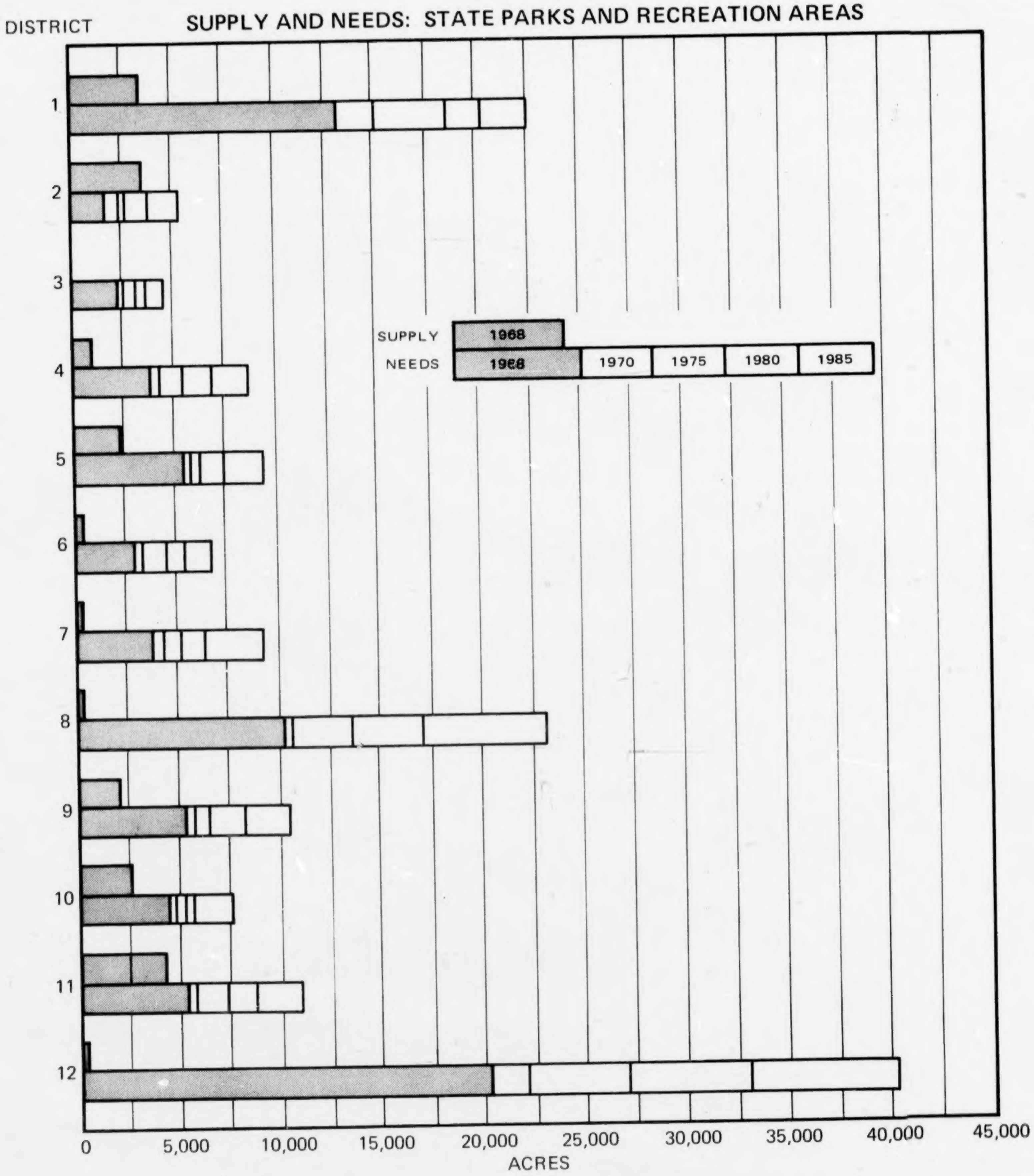
## Chart 39

## SUPPLY AND NEEDS: FEDERAL PARKS AND RECREATION AREAS



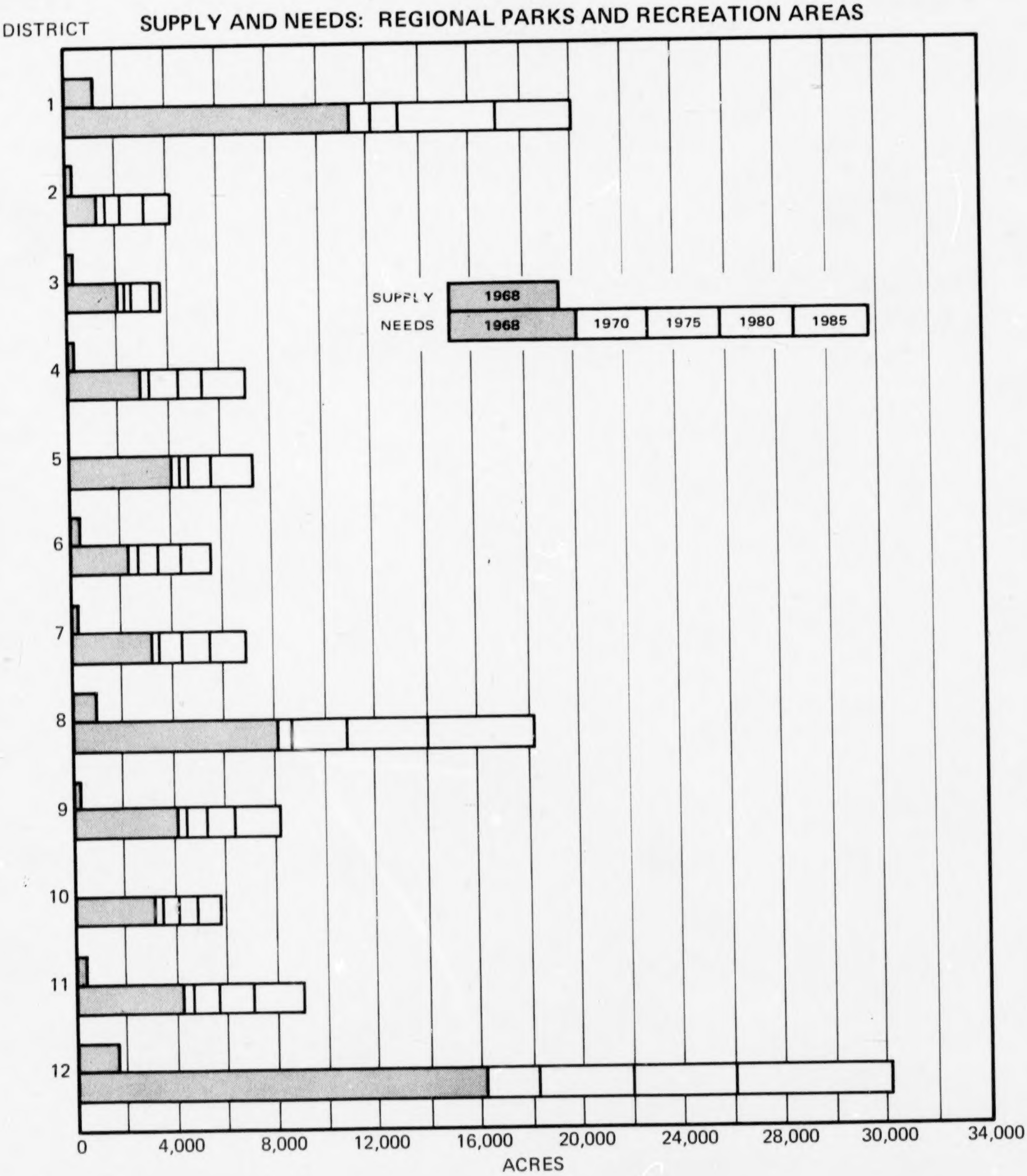
## Chart 40

## SUPPLY AND NEEDS: STATE PARKS AND RECREATION AREAS



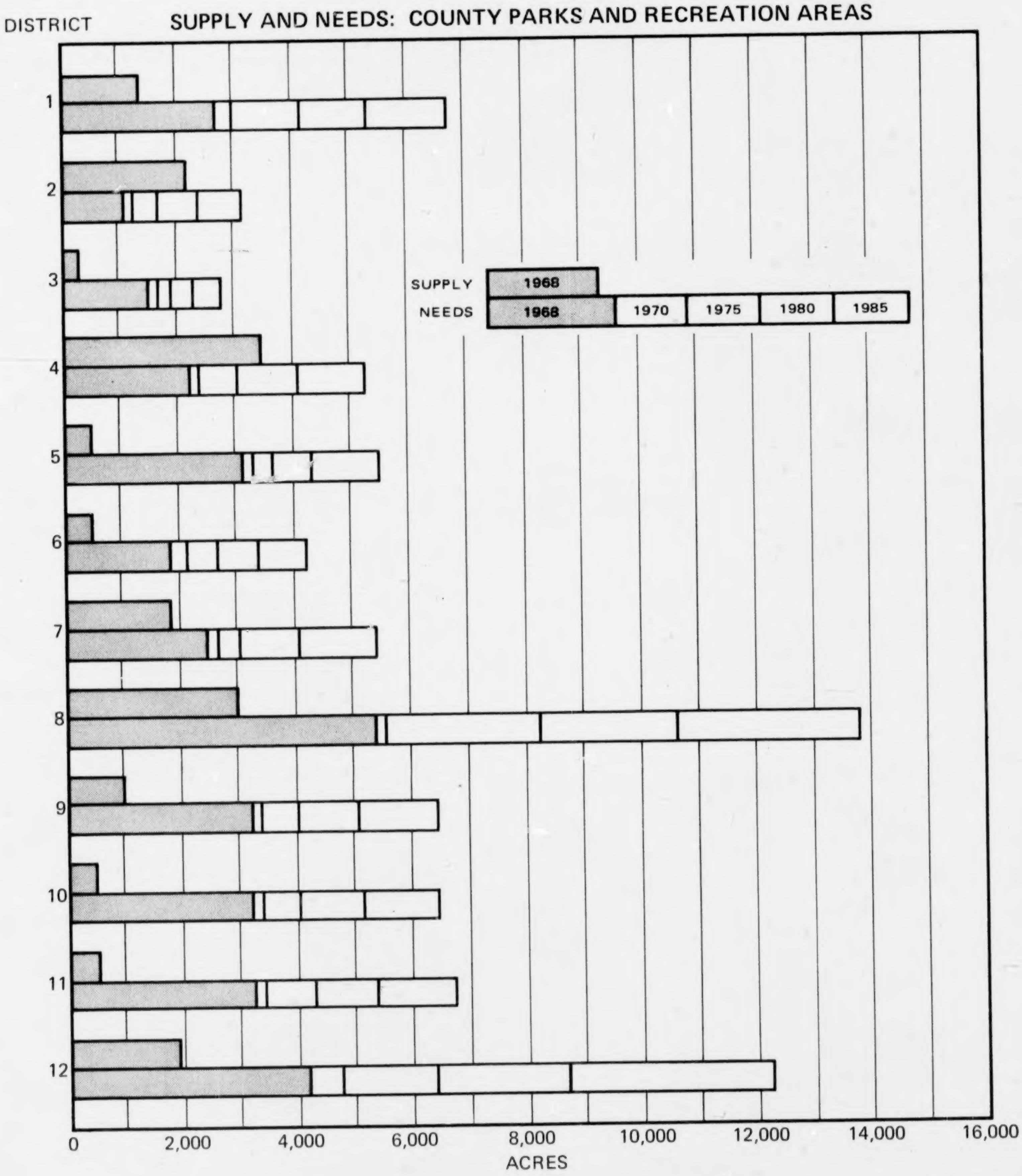
## Chart 41

## SUPPLY AND NEEDS: REGIONAL PARKS AND RECREATION AREAS



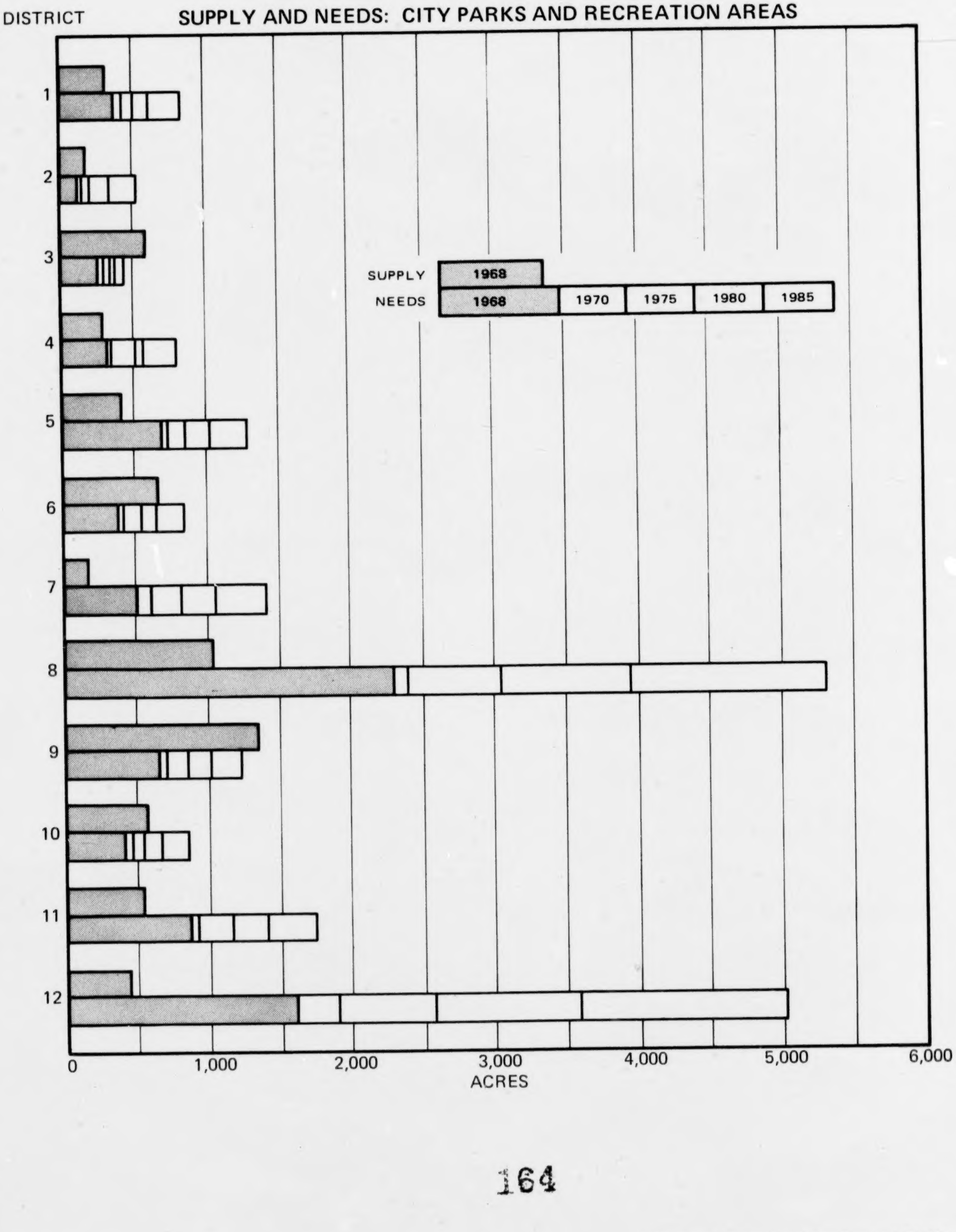
## Chart 42

## SUPPLY AND NEEDS: COUNTY PARKS AND RECREATION AREAS



## Chart 43

## SUPPLY AND NEEDS: CITY PARKS AND RECREATION AREAS



## PROBLEMS IN OUTDOOR RECREATION

Problems relating to outdoor recreation in Mississippi range from a general misunderstanding of the inherent economic and social values of recreation to the means for correcting specific deficiencies. Mississippi has two major problems that prevent or severely hinder correction of other problems. First, there is a lack of coordination among the state agencies that deal with recreation; second, there is a lack of money for recreation development.

### *Lack of Coordination Among Recreational Agencies*

Mississippi state government has seven agencies that are concerned with recreational development and have statewide jurisdiction – the Mississippi Park System, Game and Fish Commission, Boat and Water Safety Commission, Air and Water Pollution Control Commission, State Board of Health, State Highway Department, and Department of Archives and History. There are also five State agencies that have regional jurisdiction – Pat Harrison Waterway District, Pearl River Basin Development District, Pearl River Valley Water Supply District, Tombigbee River Valley Water Management District, and Yellow Creek Watershed Authority. In addition to State agencies, there are a number of county, city, and local watershed agencies with recreational projects operating, under construction, or in the planning stages. Oftentimes, State agencies are not aware of a planned development of a sister agency and/or Federal agency; therefore, duplication of expenditures and facilities takes place. This situation is compounded on the local level when political subdivisions are not aware of what the State and other levels of govenment are doing in the field of recreation.

The 1966 Legislature provided for the creation of the Mississippi Recreational Advisory Council. One of the primary objectives of this council was to coordinate and guide recreational development on the State level. This council has not been activated; therefore, the State does not have a governing body to provide effective coordination among the various levels of Federal, State, and local agencies that develop, maintain, and operate recreational areas.

The State Liaison Officer to the Bureau of Outdoor Recreation has attempted to coordinate through meetings, but he has no judicial powers to enforce coordination other than the fact that he controls Land and Water Conservation Fund monies.

### *Lack of Funds for Recreational Agencies*

Several of the major State agencies charged with the responsibility of providing, maintaining, and operating areas for outdoor recreation are inadequately funded. Some municipalities within the State have a greater individual fiscal year budget for maintaining their community programs than State agencies on a biennial basis providing areas and facilities for the entire State. As a result of this shortage of funds, a number of problems have arisen over the past several decades. One of the major problems associated with the shortage of funds is the lack of ability for the agencies to hire trained personnel in the field of parks and recreation management.

The current salary level of State Park superintendents is at the poverty level for family income. Supporting personnel in the parks, such as assistant superintendents and rangers, are salaried at even less than the superintendent. The System has not had adequate funds to make necessary repairs and provide an adequate preventive maintenance program to keep many parks up to standard because of the rising cost of materials and labor and the small increases in State appropriations. Many major facilities such as group camps and cabins need to be renovated or completely rebuilt. In some parks entire utility systems need replacing.

### *Concentration of Recreational Facilities*

Many of the recreational areas and facilities in Mississippi are concentrated in masses away from the largest areas of population. This is especially true of most of the man-made bodies of water and of the State Parks. The large concentrations of population, especially at Jackson, are not served by adequate recreational facilities. Location of facilities and acquisition of lands where the needs are greatest is a primary consideration for recreation planners. Stream development and reservoirs, for instance, should be more dispersed in smaller units closer to centers of population.

### *Land and Water Conservation Fund Policy*

The Land and Water Conservation Fund policy for development and acquisition specifies that one-third of monies be used for development and two-thirds for acquisition. Because of the underdeveloped nature of many of Mississippi's recreation areas, higher priority is needed for development of existing areas rather than acquisition of new areas, except in cases of new areas which offer outstanding potential for development and are in danger of being lost for later acquisition. Since more development is needed, the policy for development and acquisition should perhaps be 50% for each phase, or completely reversed. As shown elsewhere in this Plan, Mississippi in general has a greater need for more facilities than for more land.

### *Values of Recreation*

Most Mississippians have had little knowledge of, or concern for, the values which outdoor recreation may provide the State. In general, the people and their elected officials are not aware of the relationship between outdoor recreational opportunities and their contribution to the economy of the local communities, counties, and the State, or to the relationship between outdoor recreational opportunities and the general well-being of the participating individuals. Mississippi has always had an abundance of land and water; however, as the State becomes more urbanized and industrialized without effective land use planning and control, a portion of the land and water is being removed from public use each year. The people of Mississippi need to become aware of this loss, as well as of other problems that are connected with provision of outdoor recreational opportunities. The people of this "leisure age" need to be concerned enough to cooperate with and to encourage their elected officials to provide land and water areas for their own use, as well as for the use of future generations of Mississippians.

### *Planning for More Opportunity*

Mississippi does not have to choose between material progress and an agreeable environment. Both are needed but may be had only if planning for the future is initiated now. The sharp changes that are taking place within Mississippi, as the State takes on a new character by becoming more urbanized and industrialized, also are creating problems for outdoor recreation. The forces which increase the demand for outdoor recreation are threatening the very resources which are basic for an experience in the out-of-doors.

These problems have not become major problems yet. Loss and destruction of outdoor recreation areas are not results of growth and development, but of inefficiency and ineffectiveness in planning and coordination. The key to avoiding this problem is effective planning and zoning for land use.

Few counties and municipalities have taken advantage of the authority granted to them to assure adequate outdoor recreation areas and facilities for their people.

### *Ecological Changes*

Many forest areas in the State are being cleared, drained, and converted to agricultural, commercial or residential uses. This results in destruction of nonrenewable resources vital to recreation. Land management measures are presently removing large areas of bottomland hardwood and are altering the natural ecology of the affected river or stream. In the Delta area, hardwood bottomlands are being cleared for farm acreage taking away valuable wildlife habitats.

Streams are often dammed, dredged, channeled, or otherwise altered through engineering developments from unique and meandering waters to straight ditches or muddy lakes. To control the problem of channelization, a study should be conducted to determine which streams are necessary to stay as they are and should be preserved in a natural state. For those streams that have scenic values but are subject to flooding, engineering methods should be devised to use auxiliary streams to carry off flood waters, thereby leaving the streams in their natural states.

### *Natural Lakes*

The large public lakes throughout Mississippi, many of which are oxbow lakes, are often surrounded by private lands which do not guarantee public access or use along the shoreline. The water level of the oxbow lakes fluctuates so severely that many of them have undesirable water during the dry summer months when demand is greatest. Sediment buildup is a problem that threatens to abolish some lakes into sump water that would be inadequate for recreation.

### *Historical Sites and Scenic Areas*

Many of the State's historical sites and scenic areas are being destroyed by natural elements, vandalism, or individual thoughtlessness simply because agencies concerned with preservation of historic sites and scenic areas do not have the funds and/or authority to develop, preserve, and protect these sites. The Department of Archives and History should be adequately funded and empowered to conduct a statewide historical preservation matching basis with the National Historic Preservation Act of 1966, Law No. 89–665, to preserve and protect the most significant sites for future generations of Mississippians.

### *Encroachment*

State Parks and other major recreational complexes are being threatened by encroachment on recreation property by subdivision and esthetically undesirable commercial establishments. Boundary lines have not been established to assure adequate buffer lands. Whenever possible, exterior boundaries should be such natural boundaries as rivers or streams and/or manmade barriers such as roads and highways, with a barrier of natural vegetation to screen out unsightly development.

### *Water Pollution*

Many streams and lakes in Mississippi receive quantities of inadequately treated waste from cities and industries and from agricultural operations. Many of the cities, however, are in the process of planning for better waste treatment systems. This problem can eventually be eliminated.

The problem of pollution from agricultural chemicals will probably be longer lived, however. This problem is especially prevalent in the Delta, which is largely farm-oriented and has many natural oxbow lakes along the Mississippi and Yazoo Rivers. Since the lakes are predominantly stillwater areas, this pollution from insecticides, pesticides, herbicides, and high nitrogen-based fertilizers is more likely to remain longer in one area, and there is no satisfactory solution.

### *Recreation for the Handicapped, the Very Young, Aged, and Economically Disadvantaged*

The special physical needs of the physically or mentally handicapped are not often considered in planning for outdoor recreation. Unfortunately, many handicapped Mississippians cannot use a large portion of the State's outdoor recreation facilities because these facilities are physically inaccessible or present hazards. Not all outdoor recreation areas and facilities can be made accessible to persons with physical and mental limitations, but many can. It is believed that the handicapped should not grow up in a special world which isolates and protects them from the realities of everyday living; rather, the handicapped should use the same facilities as other people whenever feasible, with modifications, instead of special areas constructed for them.

A telephone survey to a number of agencies which work with handicapped persons revealed large numbers of handicapped persons in the State. The State Crippled Children's Service has an estimated 20,000 persons which receive medical aid from them at different times. The Mississippi Schools for the Deaf and for the Blind have approximately 300 students and 200 students, respectively. The Rehabilitation Service for the Blind has an estimated 1,132 persons on roll at the present time. The Rehabilitation Service for other handicapped persons has approximately 12,150 persons on roll. Special education courses provided by the State Department of Education have an enrollment of approximately 8,300. The Department has estimated that there are around 72,000 additional persons in the State that should be receiving these courses. From these statistics it can be seen that there are many persons in Mississippi that cannot use conventional recreational facilities without special adaptations.

For the very young, aged, and the economically disadvantaged, special considerations should also be given to adequately providing outdoor recreation opportunities within existing areas as well as those planned for the future. Modification of existing facilities, installation of special facilities, and the convenient location, accessibility, and utilization of such facilities and areas should be included in the planning of future outdoor recreation developments in the State. More study needs to be undertaken to better guide effective action for the benefit of these groups.

# CHAPTER 4
# RECOMMENDATIONS

## GOVERNMENTAL AND LEGISLATIVE CONSIDERATIONS

A review of existing legislation in Mississippi reveals that there is an existing legislative framework upon which recreation programs can be built for the State and its districts, counties, and municipalities. In the past, the State and many of its political subdivisions have not exercised powers given to them by law to acquire and develop recreation areas and facilities and establish means of financing them. There are, however, a number of discrepancies in the existing legislation that should be corrected.

### *Creation of a State Department of Environmental Conservation*

It is recommended that a legislative study committee be appointed to study the feasibility of establishing a Department of Environmental Conservation or Department of Natural Resource Management. A major impediment to achieving a workable outdoor recreation program for the State appears to be the present organization of state government. For the most part, agencies concerned with outdoor recreation are concerned with it only as a secondary or tertiary matter; most are primarily concerned with conservation or other matters. For this reason, it might be well to reconsider some of the many proposals that have been made for reorganizing Mississippi state government.

Chapter 26, "Administrative Reorganization of State Government," and Chapter 38, "Conservation," of the *Report on A Survey of the Organization and Administration of State and County Government in Mississippi*[1] are particularly interesting. A paragraph on 445 notes defects of organization:

> Generally speaking, the chief defects in the present organization are the following: (1) The wide extent to which the elective system is used; (2) the division of power among these elective officers and other agencies leading to a diffusion of responsibility and a lack of common direction and responsibility for the conduct of state administration; (3) the grouping of nonrelated functions in one office and the scattering of related functions among many offices due to the creation of numerous independent boards and departments with little reference to previously established offices; (4) the overlapping of functions and lack of coordination among state agencies; and (5) the general complex and inflexible character of the administrative machinery which makes for inefficiency and waste.

*Mississippi's Wealth*, by Robert Baker Highsaw (Bureau of Public Administration, University of Mississippi, University, Mississippi, 1947), is "A Study of the Public Administration of Natural Resources." It indicates both the importance of the development of recreational resources and their secondary association with other resources. On the first page this statement appears:

> The public administration of natural resources embraces at least five primary fields, and any study reviewing administrative action in behalf of resources must consider developments in each of them. These spheres of resources activity include the following: water, minerals, soil, forests, and wildlife. To these may be added properly scenic and recreational resources.

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[1] By Institute for Government Research of the Brookings Institution, Washington, D. C. at the request of the Research Commission of the State of Mississippi, 1932.

This publication concludes with a recommendation for a unified Department of Conservation for Mississippi which would bring together the administration of natural resources including those which directly or indirectly affect outdoor recreation. Whether or not his recommendation should be followed exactly it indicates, once again, the need for some reexamination of Mississippi governmental structure if an effective outdoor recreation program is to be maintained.

In 1950, a Legislative Fact-Finding Committee on Reorganization of State Government published *Mississippi, A Report on State Reorganization*. This report, too, recommends the establishment of a Department of Conservation which would include concern for outdoor recreation.

*Mississippi Recreational Advisory Council*

The 1966 Legislature provided for the establishment of a Mississippi Recreational Advisory Council[1]. Some comments on this act seem relevant:

1. The Council has never been activated, since no Governor has appointed the three members specifically to be named by him.
2. The Governor, in effect, appoints all members of the Council except the Director of the State Highway Commission and the Director of the Mississippi Research and Development Center, since he customarily appoints the other officers to the positions indicated.
3. Although membership of the Council covers many of the State agencies concerned with outdoor recreation, some are not directly included (particularly in the area of water utilization, river basin development, pollution, etc.) and no provision is made for representation by interested and concerned private organizations.
4. State agencies are encouraged to cooperate with the Council, but no real provision is made for restructuring State departments and bureaus to assure proper and comprehensive administration of an outdoor recreation program for Mississippi.

Nevertheless, the existence, in the Code at least, of the Mississippi Recreational Advisory Council, provides a basic and fundamental step towards achieving the governmental and legislative revisions necessary to create and administer a workable outdoor recreation program for Mississippi. It is recommended that the Council be activated at once and begin the work authorized for it to accomplish. This would be the first step for subsequent governmental and legislative action directed toward a continuing program of the development of outdoor recreation for Mississippi.

In addition to the work assigned to it by legislative act, the Council should consider reorganizing and expanding into a new State agency, preferably under a Department of Environmental Conservation or Department of Natural Resource Management. The Council should be composed of: the Comptroller of the Mississippi State Park System; Director of the Mississippi Game and Fish Commission; Director of the Mississippi Agricultural and Industrial Board; Director of the State Highway Commission; Director of the Mississippi Research and Development Center; Director of the Department of Archives and History; President of the Mississippi Recreation and Park Association; Special Assistant to the Governor for Federal–State Programs; and to serve on a rotating annual basis, the Director of the Pat Harrison Waterway District for the first year, the Director of the Pearl River Basin Development District for the second year, the Director of the Pearl River Valley Water Supply District for the third year, and the Director of the Tombigbee River Valley Water Management District for the fourth year, these persons to alternate annually thereafter in the order established.

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[1] Chapter 282 of the Laws of 1966 (incorporated as Section 5974–101 et seq., Mississippi Code of 1942).

The Council should employ and appoint a qualified executive director and a professional staff to administer its affairs and to execute the functions of comprehensive planning, plan implementation, and technical services to local and other State agencies and organizations. The Council should be funded by the Legislature to cover the planning, implementation, and technical service functions of its professional staff.

### *Liability of Private Landowners*

Legislation should be enacted to protect private landowners who provide their lands for public recreation use from being liable for damages that might occur on their land. Current legislation does not provide adequate protection for large landowners; undoubtedly this gap in existing legislation prohibits the use and development of vast acreages of commercial and private forest lands in the State for recreational use.

### *Boat Registration and Marine Fuel Tax*

Legislation governing the Mississippi Boat and Water Safety Commission should be revised to provide a more useful and meaningful system of boat registrations. Current law requires only boats that carry 10 horsepower motors and up be registered, all for the same fee regardless of the amount of horsepower or length of the boats. A system that would require all boats to be registered with the registration fee prorated on the size of the boat and the horsepower of the motor would be more realistic.

The Commission is hampered by lack of funds to provide enough personnel to insure proper boat registrations, enforcement of the State Water Safety Laws, and proper channel markings of the State's water bodies. In order to provide additional funds for this agency, investigation should be made of the possibility of providing marine fuel tax to be earmarked for operating funds for the Commission.

### *Designation and Protection of Natural Streams*

Under existing legislation, the natural resources of the State are not adequately protected for preservation, particularly areas in, around, or along the natural waterways of the State. These areas are environmental corridors for fish and wildlife providing some of the most natural scenic portions of the State and offering a vast potential in recreational areas for future generations of Mississippians. An inventory and a study of the natural waterways of the State are needed for determination of those most suitable by either present conditions or intended use to serve as environmental corridors to be preserved and set aside as recreational or scenic streams. This study could best be conducted by the Mississippi Game and Fish Commission in coordination with other State and Federal agencies.

Upon completion of the study, legislation should be enacted to protect and preserve those streams found most suitable for recreation and scenic beauty. These streams should be given by name with the precise location of the streams or sections of the streams that are to be established as recreational or scenic streams. The act should authorize and fund the Game and Fish Commission to establish and secure environmental corridor and scenic easements in fee title or less than fee title in, around, and along the identified streams. If selected streams are located on Federal reservations, such as the National Forest Service or Federal Refuges, these agencies should be encouraged to protect and develop the identified streams as designated.

### *Enabling Legislation for Counties and Municipalities*

State enabling legislation granting powers to counties and municipalities should be changed to allow all counties, not just those with a population exceeding 100,000 inhabitants, to hire recreation supervisors for county parks and playgrounds, to pay each supervisor an equitable salary, to expend necessary sums for purchase and installation of recreation equipment, to create county recreation commissions, and to provide enabling legislation so that counties and municipalities may establish joint city-county recreation districts or commissions.

Enabling legislation is needed to allow counties and municipalities to establish and enforce flood plain zoning regulations to prevent floodway obstacles, to prevent construction and use of buildings for all but limited purposes, and to enhance and encourage recreational and other open space use, all to prevent or minimize flood loss and damage to life and property.

### *Mississippi Park System*

The act creating the Mississippi Park System should be revised to redescribe the purpose, powers, and duties of the System.[1] Recommended considerations are set forth below.

Park Board members should be appointed on staggered terms to provide continuity of park staff and policies that would not change every four years with the election of a new administration. This Board should be redefined as an advisory and policy-making body only and not as individual directors of the System appointed from each congressional district of the State.

The position of Comptroller should be redesignated and redefined as the position of Director with full authority, powers, and duties to administer the Park System and its personnel on a day-to-day basis. The Board should appoint the Park Director (Comptroller) and the Director should be authorized to select and appoint his employees. All employees of the System should be recommended for employment by the Director with approval by the Board, and the Board's present authority to replace, hire, and fire employees should be removed and placed under the powers of the Director.

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[1] Chapter 240 of the *General Laws of the State of Mississippi*, 1964, Senate Bill No. 1966.

*Stream Ownership*

One of the most critical legislative needs of the State is to revise and update laws governing and defining streams to be declared public waterways. A recent court ruling in a Mississippi county set a precedent when it ruled that the second largest stream in the county was a private stream and that members of the public had no right to enter upon the surface of the stream by any means whatsoever. If this ruling is allowed to stand, it will have a negative effect on the public and will severely hamper recreational development by State agencies. Under existing legislation only those streams that are defined as public highways for public use and the highway designation is dependent upon whether or not that stream is navigable or has commercial or pecuniary value. With the popularity of water-based recreation and the even greater forecast rise in popularity, legislation is needed now to insure accessibility and use of State-owned streams for recreation.

Three sections of the Mississippi Code Annotated (1942, compiled) state:

Section 686, *Navigable Waters*

> "All rivers, creeks and bayous in the State, 25 miles in length and having sufficient depth and width of water for 30 consecutive days in the year, to float a steamboat with carrying capacities of 200 bales of cotton, are navigable waters of this State and public highways."

Section 8413, *Navigable Waters – Public Highways*

> "All bays, inlets and rivers and such of the lakes, bayous and other water courses as shall have been or may be declared to be navigable by act of the legislation or by the Board of Supervisors of the county in which the same may be shall be public highways."

Section 8414, *Water or Navigable Waters*

> "All rivers, creeks and bayous in the State, 25 miles in length and have sufficient depth and width of water for 30 consecutive days in the year, to float a steamboat with carrying capacities of 200 bales of cotton, are hereby declared to be navigable waters of this State."

These antiquated laws point out the dire need for revising and adding new legislation governing the State's rivers and streams.

*Riparian Rights*

Currently in litigation in the Mississippi State Supreme Court is the question of private vs. public rights to beach area in Mississippi. Although outcome of the case is uncertain, some clear definition of riparian rights is essential to insure proper development of Mississippi's beaches.

## PLANNING RECOMMENDATIONS

### *Environmental Quality Management*

Qualified individuals in park and recreation planning, landscape architecture, and engineering should be sought for employment by the Mississippi State Park System. These professionals should be made available to other agencies such as communities, counties, watershed districts, river basin planning groups, and rural area development agencies which are concerned with outdoor recreation. The use of these professionals would minimize site destruction and would aid environmental preservation and conformity of design of major and minor outdoor recreation development.

### *Planning*

Recreational site planning should consist of:

1. Reconnaissance investigation and analysis of site in relationship to those expected needs that a specific project would meet
2. Reconnaissance and preliminary study to determine if the project site has major environmental intrusion factors such as pollution, utility easements, etc., that would mar or destroy the physical environment of the area and to determine if the site could support the proposed facilities to be placed on it
3. A master plan for maximum site development with a phased schedule of development and design of roads, parking and service buildings, drainage, sanitary and other utility systems, grading, landscaping, campgrounds, picnic grounds, trails, overlooks, rental units, swimming pools, and beaches
4. Consideration of maximum desirable boundaries to provide adequate buffer lands, the boundaries primarily being such natural boundaries as rivers and streams, or man-made boundaries such as roads and highways
5. Utilization of topograhical and area maps in site design
6. Zone use planning, utilizing the node or cluster concept in site development and in all facility design of cabins, lodges, roads, and parking areas and sanitary systems. This method of planning allows the surrounding landscape to be left natural for common enjoyment. In this way, the land needed for human occupancy can be developed without destroying those natural features of the site which made it attractive in the beginning.

### *Development*

Screening of all service areas such as service buildings, sanitary sewage systems, and other utility systems that are necessarily above ground should be done by natural vegetation, hedge, and attractive fences. Proper use of screening allows the necessary systems for living areas to be encompassed so as not to detract from the natural environment of that area. All permanent structures should be designed to fit into the landscape. The beauty of the park structure is dependent, at least in part, upon the beauty of the site. The two must be integrated in a way that emphasizes the best features of each. For the structure to have complete harmony with its surroundings, the site itself should be altered only as necessary to take advantage of its best features. All utility systems, power lines, water lines, sewer lines, and telephone lines should be placed underground. Landscaping, except for areas designed as garden spots, should consist of on-site plants left in place and protected during construction or plants moved into place to complement the preserved plants and man-made structures.

### *Opportunities Near Urban Areas*

The expanding urban centers of the State, primarily the Jackson and Gulf Coast areas, have serious shortages of recreational opportunities; therefore, emphasis should be given to the location of new areas and facilities to serve the urban population. These new areas and facilities should be located, when possible, no more than one hour's driving time, and preferably less, from the homes of urban residents. Expanding metropolitan areas should maintain and protect adequate open spaces for conservation, beauty, and recreation, especially in rapidly developing fringe areas.

Municipalities and counties should begin now to provide additional lands and water for outdoor recreation by:

1. Establishing county parks with financing shared by the county board of supervisors and the legislative bodies of municipalities within the county
2. Using the school-park concept, which encompasses three major areas:
   a. The role of the school in operating recreational programs independently or in a formal co-sponsorship with park and recreation departments
   b. Cooperative relationship in which the school provides its facilities for use by a public recreation and parks department with major emphasis placed on design and construction of both indoor and outdoor facilities so that they are of optimum usefulness and provide maximum accessibility for both
   c. Education for leisure, seen primarily as the responsibility of the school but also of important concern to community agencies
3. Acquiring and zoning for public recreation those lands outside the corporate limits of municipalities which offer potential value as future recreational areas to be provided by municipal governments
4. Stipulating in subdivision regulations that the developer must set aside a portion of his land for recreation and park land purposes
5. Requiring that public outdoor recreation lands acquired to build other essential public facilities be replaced with lands of equitable size, usability and quality that will serve the same population
6. Zoning for prevention of encroachment by incompatible land uses upon public park and recreation areas
7. In urban areas which have free-flowing streams, enacting local as well as State zoning enabling laws governing development in flood plain areas to protect wetlands valuable for flood control, water retention, and fish and wildlife conservation as well as to prevent destruction and loss of real and personal property.

The above steps apply more to urban-related user-oriented recreational areas than nonurban parks. It is recognized that the development of new areas, especially resource-oriented ones such as reservoir and river projects and areas of outstanding natural beauty, is largely dependent upon geographic location and physiographic environmental conditions and that all recreational needs cannot be simply set aside to provide recreational opportunities near population centers. Many recreational experiences can only be enjoyed through full utilization of natural resources where they exist.

### *Simple Activities*

Past studies, national and southern as well as state, have shown that the simpler outdoor recreation activities are the most popular and, therefore, should receive major emphasis in planning. These activities include sightseeing, driving for pleasure, walking for pleasure, swimming, fishing, hunting, picnicking, family and youth camping, hiking, bicycling, horseback riding, nature study, and boating.

### *Water as a Focal Point*

Because of the popularity of water-based activities, development of areas and facilities on or near water will have high priority. Fishing, swimming, and boating are among the most popular outdoor activities in Mississippi and will continue to remain high in popularity. Camping, picnicking, and hiking, also very popular, are more desirable near water. Adequate shorelines around reservoirs and lakes should be acquired for land-based, water-related activities. Scenic and recreational use easements should be acquired either by fee title or less than fee title along the shorelines of existing lakes and waterways. Shorelines should be zoned for maximum recreational benefits to maintain quality and to prohibit incompatible uses.

### *Multiple Use Areas*

Recreation can be one of several uses in a single area and can be a use in an area developed primarily for a different use, such as flood control or navigation; therefore, planning for outdoor recreation should be included in planning for water resource development, forest and wildlife management, urban renewal, highway construction, and similar public developments.

### *Special Consideration for the Handicapped, Very Young, Aged, and Economically Disadvantaged*

Public park and recreational facilities, whether under municipal, county, State, or Federal auspices, should be accessible to all Mississippians, including the physically and mentally handicapped, the very young, the aged, and the economically disadvantaged. Agencies that are concerned with outdoor recreation must develop facilities in such a way that everyone may use them despite a handicap or disabled condition.

In the preliminary master plan studies consideration should be given to providing maximum access for handicapped persons to all activities in which they might participate or be spectators and to those persons economically disadvantaged as well as senior citizens. Physically handicapped persons to be considered include those confined to wheel chairs, those who walk with difficulty (including those with braces or crutches), those who are blind or see with difficulty, those who are deaf or hear poorly, those who are poorly coordinated or subject to palsy, those who are mentally handicapped, and those who are infirm from age. Structures and equipment that might be used by handicapped persons should be especially adapted to such use whenever possible, and special signs and maps should direct handicapped persons to facilities adapted for their use.

*Future Research and Planning*

1. Recreation user surveys should be conducted each summer to keep abreast of recreation desires and habits of visitors to State Parks and other developed recreation areas.
2. Special programs of outdoor recreational development for the mentally and physically handicapped, the very young, the aged, and the disadvantaged should be put into effect.
3. An in-depth study should be made of all State agencies involved in recreation, with specific consideration given to interagency and interdepartmental relationships, coordination, organization, administrative functions and policies, operating procedures, programs, goals, and financing.
4. A study is needed of recreation, tourism, historical, cultural, scenic, conservation, and educational development potentials in the State, determining their problems and needs for greater effectiveness and coordination.
5. A significantly valid field study should be made to determine resident and nonresident demand for projecting future needs for areas and facilities.
6. A survey should be made of other sources of monies available to the State for outdoor recreational development that would augment the Land and Water Conservation Fund and Open Space Funds of the Bureau of Outdoor Recreation and the Department of Housing and Urban Development.
7. The economic impact of recreation upon the State's economy and recreation's role as an emerging industry should be studied.
8. The relationship of recreation to industrial development in the State should be determined.
9. A comprehensive study of the State Park System is needed to determine fiscal, financial, personnel and operational needs, least cost alternatives, and benefit-cost comparisons involving existing parks and providing new parks to investigate new methods of park operations; and to produce a financing and development program for State Parks.
10. A study should be made of the effects of various forms of recreation upon the physiological and psychological well-being and behavior of individuals.
11. A study of the relationships of leisure time used in outdoor recreation to the general social well-being of the community and State should be made.
12. Comparative needs, effectiveness, and value of recreation in relation to different age groups should be determined.
13. Plans should be made to discover, test, and develop a more efficient use of leisure time in the out-of-doors.
14. A study should be made of recreational values and their ralationship to values offered by other opportunities.
15. A sound methodology should be developed for estimating and forecasting demand.
16. There is a critical need for a study of estuaries in Mississippi to outline what public action is necessary to preserve them for conservation and recreational uses.

## SUPPORTING ACTIONS

### *Protection of Recreational Areas*

Recreational areas should be defended strongly against encroachment from incompatible uses, both public and private. Public agencies should use their regulatory powers to zone land and water areas for maximum recreational benefits, to maintain high quality, to insure public safety, and to resolve conflicts between recreation and other uses and conflicts among the various recreational activities. Buffer zones adjoining prime recreational and scenic areas should be acquired to provide protection from encroachment or incompatibility of use threatening to reduce the quality of recreational benefits. Recreation lands must be taken for other public uses such as highway construction, but this land should be replaced with other land of similar quality and comparable location.

### *Preservation of Natural and Historical Resources*

A concentrated effort should be made to protect and preserve outstanding historical and natural areas and sites before they are destroyed or rendered unattractive. Several of these should perhaps be included within the State Park System as new recreational parks, historical parks, or monuments. This concentrated effort should involve close working relationships among State agencies, particularly the Department of Archives and History, local governments, and civic groups interested in historical preservation. Historical and natural areas of significance will become increasingly important as tourist attractions contributing to the improvement of local economies.

### *Pollution Abatement*

Every law enforcement and engineering tool should be used to control the pollution of lakes and streams. Rigid control must be administered by the Mississippi Air and Water Pollution Control Commission and strong punitive measures taken against violators when necessary. These controls must be enforced by municipal, county, regional, State, and Federal agencies.

### *Beautification*

Major efforts by government at all levels and by interested civic organizations working closely together should be directed toward beautification of cities, communities, countrysides, highways, and streams. Beautification programs should be initiated by Federal, State, regional, county, and city officials in support of, and receiving support from, the many civic-minded groups and individuals.

### *Interpretive Programs*

Outdoor recreation and conservation education are interrelated and basic to the development and maintenance of high quality experiences in outdoor recreation. Personal satisfaction from recreational experiences and opportunities themselves for recreation participation are dependent upon individual knowledge, understanding, and appreciation of the outdoors. Park interpretation programs, therefore, are important as a form of recreation itself and as a basis for enhancing other outdoor recreation experiences. Nature and history interpretation should be instituted as major programs in outdoor recreation settings. Such programs should be appropriately funded, staffed, and provided with facilities by park and recreation agencies. The public school system should give more emphasis to curriculum experiences in outdoor education, conservation education, and education for leisure living.

*Mississippi Park System*

The Park System by legislative act is charged with having full jurisdiction and control over the State Parks, which parks shall be operated for the purpose of providing outdoor recreational activities and enjoyment for the citizens of the State of Mississippi and for the purpose of attracting tourists to the State.

For the System to function at a higher degree of effectiveness, there are several recommendations that should be considered in addition to those in the legislative consideration section. It is recommended that the System develop a Comprehensive Master Plan that would be both short and long range in scope. This master plan for the System should consider, among other things, determining physical, financial, personnel, and operating needs; least cost alternatives and benefit/cost comparisons of improving existing parks and providing new parks; investigating new methods of park operations; and producing a financing and development program for the System. In addition to the master plan for the System, each State Park should have a development plan for maximum site development, defined boundaries, adequate maps, and an action plan for the elimination of encroachment.

The System should develop an administrative manual to guide its day-to-day operations. This manual should include philosophy, financing, operating policies and procedures, and job descriptions, so that employees of the System would have uniform knowledge of the System's policies and know proper procedures to follow in their duties. The existence of such a manual would insure that policies and procedures would not be changed by a quick decision and would provide for continuity of established policies with succeeding board members.

Existing individual park advisory councils such as that of Paul B. Johnson State Park should be abolished. By pressuring for improvement for a single park instead of for the entire system of parks, these individual advisory councils create difficulties for the Comptroller and for the State Park Board.

The Park System should employ in the Jackson office a professional businessman with an understanding of park operations to be in charge of all concession operations. He would work with the various park superintendents, and if the need developed, with separate concession managers in the larger parks. Each park superintendent and concession manager should be on a salary commensurate with the responsibility of the job, but should not be on a commission basis regarding the concession operation.

All revenue from concession operations should be paid into the State Park fund. A formula should be worked out that would return a percentage of concession profits to each park, a percentage to the Jackson office, and a percentage to be redistributed to all parks, according to need. In other words, all the profits generated in one park should not be returned to that park, but should be equally distributed to that park and to the operation of the main office and those parks which do not generate enough profit to pay their way.

The traditional means of financing capital improvements for State Parks has been by issuance of bonds by the State. The major portions of routine operation and maintenance are financed by legislative appropriations and must continue to come from legislative appropriations and from user fees for specific activities. These funds are not in a sufficient amount to provide and maintain high quality parks; therefore, additional means of generating funds for the System must be sought. There is a possibility that more operating revenue could be obtained from concession operation through the reorganization discussed above.

Two additional means of financing are recommended: (1) requiring counties to participate on a ratio basis and (2) instituting park entrance fees. Participation by counties could be on the basis of requiring the appropriation and donation to the Mississippi Park System of a slated proportion of tax money, perhaps one mill on the dollar of all taxable property, for those counties within which a State Park is located and a proportionately lesser amount for other counties, the amount decreasing as the distance from a State Park increases.

The other means, park entrance fees, is being used by several states and is being considered by several more. An annual pass, similar to the Federal Golden Eagle Passport, could be sold for five dollars to allow entrance of the holder and the other occupants of one car to all State Parks an unlimited number of times during the year. Daily entrance fees of about 25 cents per person or one dollar per car could accommodate the occasional visitor or tourist to a single State Park. Park entrance fees, in addition to increasing the revenues for park operation and improvement, provide a fair share method in which the park user pays more than the nonuser for the outdoor recreational opportunities provided.

If the system of entrance fees and even user fees is initiated, the Park System should instigate a public information program designed to fully educate the public that those monies received will be returned to the parks for park improvements and operation to provide better and higher standards of facilities for their use. Care must be exercised in establishing the amount to be charged so it will not prohibit the use of the parks to anyone desiring to use them. The System should coordinate with the waterway districts that have or are building major park facilities to standardize all entrance and user fees. If the System initiates an annual pass, there should be an agreement between the System and the waterway districts to honor it.

### *Cooperative Management and Financing*

Public agencies at the same and at different levels of government should have closer lines of communication, cooperation, and program coordination in implementing the *Mississippi Statewide Comprehensive Outdoor Recreation Plan.* Closer working relationships and lines of technical assistance should be developed between all levels of government, and between all agencies and semipublic organizations and the private sector. Agencies and organizations should assume and carry out the roles defined for them in the Policies and Responsibilities section.

Economic development districts, river basin development districts, and county and municipal governments must assume a greater responsibility than in the past toward meeting the needs of their citizens for outdoor recreation. Local governments should consider these needs in land-use planning, should open areas with recreation potential to such use, and should acquire new areas where these are needed. Local governments should give greater emphasis to expanding existing opportunities and, whenever funds become available, they should work to develop entirely new opportunities. Several cities presently without municipal park and recreation departments should establish and support such departments. Departments of recreation and parks, where these now exist separately, should be combined into single departments to ensure coordination of public recreation programs. Counties and municipalities should enter into joint programs to form park and recreation departments to extend recreational programs and facility opportunities to rural and metropolitan areas.

With the popularity of water-based recreation, and the predicted increase in popularity, State and local governments must take advantage of the Federal Water Project Recreation Act (Public Law 89–72). In brief, the Federal Water Project Recreation Act, approved July 9, 1965, establishes uniform policies for the inclusion of recreation and fish and wildlife enhancement development at planned and existing Federal water resources development projects. The Act provides that the Federal Government will bear not more than one-half the separable costs and all joint costs allocated to recreation and fish and wildlife enhancement if a nonfederal public body indicates in writing that it will pay the remainder of the separable costs, pay all operation and maintenance costs, and administer the land and water areas for recreation.

In the absence of nonfederal intent to administer and share in the costs for recreation and fish and wildlife, facilities for these purposes may not be included in a Federal water resource project. However, lands may be provided in connection with project construction to preserve the recreation potential of the project for a period of ten years. Recreation development of new areas at existing water resource projects is provided for in the implementation procedures. There are five types of existing Corps projects where recreation land, water, and facilities can be provided to the nonfederal public bodies. In some cases, they can be made available without cost. In other cases, the cost-sharing provisions of the Federal Water Project Recreation Act will supply.

Mississippi has a rather unique marriage of Federal, State, and private enterprise on projects within the southeastern section of the State utilizing Public Law 89–72. This arrangement so far has proven satisfactory and should set an example to follow. The U. S. Army Corps of Engineers secures the land and constructs the reservoirs, and the State's Pat Harrison Waterway District develops the shoreline and provides all basic facilities for outdoor recreation. These facilities are leased to concessionaires to be operated and maintained as private enterprises. The concessionaires then build the more costly facilities such as marinas, cabins, etc. This program, perhaps, could set the pattern for future development of major areas that would be too costly for one agency to build and maintain.

Economic development districts should have vital parts to play in recreational development as well as in economic development, not only to provide pleasant environments to help secure new industries, but also to secure new recreational industries. The development district agencies should take the leadership in stimulating, encouraging private enterprise to develop outdoor recreation projects and giving technical assistance. It is recognized that the semipublic and private organizations have a vital role in Mississippi to provide opportunities for outdoor recreation. These organizations help fill the gap between the demand and the supply which can be only partly provided by Federal, State, district, county, municipal, and other public bodies. These organizations and groups should be encouraged, stimulated and assisted, both technically and financially, by public agencies concerned with recreation.

Government agencies should work actively to stimulate gifts of land as well as money from private individuals, landowners, or other sources for outdoor recreation porposes. Encouragement should include such arrangements as leases for hunting and fishing, scenic easements, and provision of liability and damage protection for landowners who allow the public to use their lands. The large wood pulp and paper industries have extensive land holdings in Mississippi; these corporations should assume an important role in supplying a variety of recreational opportunities, particularly when they do not interfere with normal operations or cause harm to the properties which are used.

Responsibility for financing the expansion and development of existing public areas and the acquisition and development of new public areas should be shared among the Federal government, Mississippi, district agencies of the State, counties, and municipalities. However, the degree to which Mississippi's active program will be accomplished appears to be primarily dependent upon the allocation of Federal grant-in-aid funds, especially from the Land and Water Conservation Fund Program, to the State. Unless such supplementary funds are increased over past allocations, accomplishment of desired objectives in satisfying outdoor recreation needs in Mississippi will fall short of scheduled progress.

In addition to Federal money spent on Federally-owned and operated areas within Mississippi, the Bureau of Outdoor Recreation, using the Land and Water Conservation Fund, will match equally money spent by the State and/or its political subdivisions for purposes of enlarging outdoor recreational opportunities. It is entirely possible that available Land and Water Conservation Fund money could be matched from one source or one type of source, principally the water development districts of the State. However, this money should be used by several agencies at the State level and by local jurisdictions to provide for needs in a balanced manner.

Use of Land and Water Conservation Fund allocations at the State level to most effectively support the five-year action program will be accomplished through the allotment of two-thirds of such funds to projects planned by State agencies and one-third to projects planned by the State's political subdivisions. (Since the State's river basin development districts are State agencies, but have regional or local responsibilities, they are included in the allotment to State agencies.) Such a distribution should be viewed as highly flexible and subject to modification when applicable.

### *Highways and Roadside Parks*

The primary purpose of the State Highway Department is to provide highway circulation throughout the State to serve the demands of agriculture, industry, and interstate commerce. With the completion of Mississippi's extensive system of interstate highways, which most industrial and interstate commerce traffic will use, the Highway Department should start designing and planning highways for the enjoyment, as well as convenience, of the traveler.

Existing highways that run through scenic areas of the State should be rehabilitated as scenic routes. The highways or sections of highways selected as scenic routes should undergo a beautification program to include acquisition and development of easements, zoning against undesirable roadside development, provision of overlooks, and development of recreation areas similar to roadside parks, possibly with some overnight camping facilities.

Signs should be placed informing the traveler in advance of his approach to historical markers and sites and turnouts with parking areas should be constructed at historical marker sites.

When appropriate, the urban freeway can provide a logical and useful boundary between different land use areas. Such a separation is welcome, for example, between heavy industrial complexes and a recreational area or between a residential neighborhood and a regional shopping center with its heavy traffic and large parking areas.

Highways and freeways should not encroach upon park lands, playgrounds, squares, plazas, or other open space preserves. They should add to rather than subtract from the city's open spaces. A careful study of impact upon park and recreational resources should be an essential part of every highway and freeway location proposal.

New highway planning and construction should encourage a high level of visual quality on every proposed highway. Each highway plan reviewed should demonstrate careful consideration of esthetic values. Highways should contribute to the beauty of the region through which they pass from the standpoint of both the user and viewer of the facility.

So far as visual qualities and highway design are concerned, the best solutions are natural solutions. These include the rolling of the highway with or around, rather than across or through attractive topographical features. Scars resulting from road cuts should be minimized. Attractive landscape elements such as marshes, hills, and groves should be preserved and featured rather than destroyed. Within the more rapidly urbanizing areas of the State the State Highway Department and local government agencies are encouraged to purchase and develop freeway recreational corridors jointly. Freeways should not only provide access to recreational facilities but should be considered in themselves major recreational facilities. This approach is envisioned by which the freeway is designed to move through an expanded right-of-way purchased by the Highway Department in concert with municipalities, and devoted to scenic and recreational purposes. Such a multiple-use corridor would provide besides the roadway, such pleasures as fishing and boating, lakes and streams, golf courses, game courts, riding and walking trails, wildlife sanctuaries, and conservation lands. The freeway recreation corridors should connect with and bring into urban metropolitan areas, suburban or rural attributes.

The State Highway Department is encouraged to purchase in fee title borrow pits in areas that would be feasible at some future date to convert into fishing and/or recreational lakes in conjunction with roadside park development.

Roadside parks and rest areas could serve a useful purpose by introducing the traveler to Mississippi wildlife and history through the use of imaginative plantings and interpretive markers, and though they are considered a driver convenience for many, their most useful function is as a safety factor. It is hoped that drivers will leave these areas rested and alert for the next segment of their trip. Therefore, the location and quality of areas is especially important. Rest areas, especially along interstate routes, should be spaced approximately 40 miles apart so they will be available to the traveling public within 30 to 40 miles driving time.

Some of the above suggestions could be accomplished under the authority of Section 319, Title 23, *"Highways,"* United States Code, which provides that an amount to the three percent of the funds apportioned to the State out of funds appropriated under authority of this subsection may be used for rest and recreation areas of limited size, without the funds being matched by the State.

## POLICIES AND RESPONSIBILITIES

### *Policies*

The following general policies will provide direction for outdoor recreation resource development in Mississippi.

1. The State of Mississippi will seek to preserve, develop, and assure accessibility to all people of Mississippi, both present and future generations, such quality and quantity of outdoor recreation resources as will be necessary and desirable for individual enjoyment and to assure the spiritual, cultural, and physical benefits that such outdoor recreation provides.
2. The State of Mississippi finds and declares it desirable that all levels of government and private interests take prompt and coordinated action to the extent practicable without diminishing or affecting their respective powers and functions, to conserve and develop the State's outdoor recreation resources for the benefit, health, enjoyment, and vitality of the State's citizens and to encourage active individual participation.
3. Outdoor recreation development in the State of Mississippi will be compatible with, enhance, and complement natural, historic, scenic, and cultural features of any development area.
4. The private sector is encouraged to contribute to outdoor recreation development in the State of Mississippi through development and operation of sites and facilities, where feasible.
5. Emphasis will be given to meeting the outdoor recreation needs of the citizens of Mississippi; however, opportunities for out-of-State users will be given full consideration in development of the State's outdoor recreation resources.

### *Federal Outdoor Recreation Responsibilities*

The responsibilities of the Federal Government in the field of outdoor recreation should be:

1. To develop a nationwide outdoor recreation plan with coordinated action from Federal agencies and other interested groups.
2. To manage Federally-owned land and water resources for the broadcast recreation use possible consistent with other uses of similar importance or priority.
3. To acquire and provide suitable management for land and water areas, representing an appropriate balance between unique areas without respect to location, and for areas near population centers, including scenic areas, natural wonders, and wilderness areas, wild rivers, historical sites, wildlife refuges, wetlands, parks, parkways, scenic roads, shorelines, and national recreation areas.
4. To encourage the use of the concession system, when feasible, to provide services to the public on Federal lands as a means of encouraging private enterprise and reducing governmental expenditures and personnel.
5. To consider outdoor recreation as one of the primary purposes in planning multiple-purpose water resource developments and to allocate an equitable share of the cost to outdoor recreation, including fish and wildlife enhancement.

6. To give full consideration to outdoor recreation in the planning and conduct of programs to which the Federal Government makes substantial financial contributions, such as highway construction, agricultural conservation, pollution abatement, open space, and urban renewal.
7. To assure adequate measures for public health, safety, and pollution control in Federally-administered recreation areas, and to encourage the adoption of comparable measures by state, local, and private organizations.
8. To encourage active continuing state and local responsibility for planning, development, and administration of recreation facilities.
9. To provide grants-in-aid to states and local governments for the planning, acquisition, and development of outdoor recreation resources and facilities.
10. To provide, in appropriate cases, technical and financial assistance to the private sector and to state and local governments.
11. To promote interstate and regional agreements, including Federal participation when necessary or desirable.
12. To encourage private and public agencies to sponsor and conduct research in the broad field of outdoor recreation.
13. To encourage states and their political subdivisions, and semipublic and private groups, organizations, and individuals to construct and operate recreation facilities and programs on Federal land when, in the judgment of the administering agency, it is in the public interest to do so, taking into account the long-range plans for the states and the Federal Government.
14. To assure that appropriate consideration is given to the recreational potential of surplus real property proposed for disposal by any Federal agency.
15. To establish criteria for the imposition of reasonable user fees applicable to appropriate classes of Federally-administered recreational requirements of special groups of individuals, while eliminating undue competition with the private sector and reducing the burden placed upon directly appropriated funds.
16. To encourage development of recreation education, both in the classroom and through such tools as workshops, interpretive programs, and nature centers.
17. To encourage state and local governments to adopt liability, zoning, and taxing legislation which would encourage development of recreation areas on private lands.
18. To encourage the proper use of private consultants who are available to provide expert advice and services in connection with many aspects of recreation.

### *State Outdoor Recreation Responsibilities*

The State should play a pivotal role in recognizing, developing, and managing outdoor recreational resources that fall in the categories between national and local significance. In general, the State should exercise a role in relation to local and private interests analogous to that exhibited by the Federal Government. More specifically, the State should:

1. Develop a comprehensive statewide long-range plan for outdoor recreation as a significant element of state development plans, taking into account all Federal, local, and privately-owned outdoor recreational resources and programs within the State.

2. Cooperate with local and private agencies, as well as the Federal Government, in the inventory and evaluation of outdoor recreational opportunities, and in measuring the need for such opportunities.
3. Acquire, develop, manage, and maintain outdoor recreational resources of State significance.
4. Provide adequate financing for recreation through taxation, bond issues, user fees, and other means as appropriate.
5. Devote adequate consideration to zoning, regulatory powers, and the use of less-than-fee-acquisition, such as easements, in providing outdoor recreational opportunities.
6. Cooperate with other states and the Federal Government in the acquisition, development, and management of outdoor recreational resources having interstate significance.
7. Assist local governments and private enterprise in planning and developing recreation facilities at neighborhood, city, and metropolitan levels, with particular emphasis on comprehensive recreational developments serving metropolitan areas.
8. Provide legislative authority for local governments to issue bonds for the financing of recreation and to give direct financial assistance where appropriate.
9. Utilize a concession system, when feasible, to provide services to the public on State-owned lands. Use of such a system would act to stimulate private investment and to reduce government expenditures for recreational development.

### *Local Government Outdoor Recreation Responsibilities*

As the level of government closest to the people, cities, counties, and other political subdivisions of the State are in the best position to know the needs and desires of their citizens and to gauge requirements for community and neighborhood outdoor recreational resources and facilities. They have an important responsibility for working closely with their citizens and local organizations in seeing that outdoor recreational needs are recognized, understood, and effectively met. The local governments should:

1. Cooperate with State and Federal agencies in the development of plans and programs for recreation as part of, or consistent with, overall State, regional, and local development plans.
2. Maintain an up-to-date inventory of existing and potential recreational resources.
3. Give greater consideration to outdoor recreation, playgrounds, municipal parks, and open-space requirements in developing plans for future urban expansion or renewal and in the construction of schools, highways, water supply and refuse disposal systems, and other public projects.
4. Provide adequate financing for recreation through taxation, bond issues, and user fees, as appropriate.
5. Acquire in fee or through easements those rights in land and water management of public recreation areas of adequate quality and carrying capacity, conveniently located to major concentrations of people.
6. Make maximum use of such devices as land-use zoning, subdivision regulations, and assessment practices to encourage the provision of outdoor recreational opportunities and the protection of open space.

7. Encourage industrial firms, service clubs, youth groups, labor organizations, and other civic groups to invest in recreation sites and facilities for the enjoyment of members and their families.
8. Cooperate with private investors seeking to establish new commercial recreational enterprises consistent with the development plans for the area by assisting in the search for suitable sites, negotiating to assure provision of utilities and services, securing road connections, providing buffer zones, and similar constructive measures.
9. Review internal organization and, when necessary, appoint or designate a central agency or person to take responsibility for coordination of all recreational interests.

### *Private Outdoor Recreation Responsibilities*

The role of the private sector is by its nature different from that of government. Provision of specialized outdoor recreation facilities by the private sector to the general public revolves around a profit motive. Therefore, specific responsibilities cannot be assigned to private enterprise. Provision of these facilities is dependent upon monetary return in profit to the operator. It is therefore axiomatic that government create and maintain a favorable climate within which private initiative, funds, and talent can expand such recreational programs and facilities successfully.

Through tax policy, financial incentives, and loan and grant programs, government can influence the scope of outdoor recreation development by private enterprise for public use in Mississippi and the nation. Technical assistance is not enough; a positive, aggressive attitude toward public outdoor recreation development by the private sector on the part of the Federal government and its agencies, and immediate financial assistance to the private sector by the Federal government on a scale comparable to that of local governments is most needed if private enterprise is to participate in outdoor recreation development at a level necessary to make a positive contribution to the satisfaction of growing needs.

Public agencies, however, do have a responsibility to those individuals or groups who provide outdoor recreation facilities to the public as a business venture. The State or its political subdivisions should not compete with private enterprise in those areas in which private developments for public use can be provided profitably at reasonable fees. Coordination of developments between public agencies and private groups is necessary to insure the best results in overall public benefits.

In many instances, it will be necessary and desirable to develop private facilities on public lands. In these cases, the concessionaire will have the responsibility of developing facilities to meet the need for which the concession was granted and of sufficient quantity to meet the public needs. Whenever feasible, all levels of government should utilize the concession system of private operation of recreation facilities on public lands. This will encourage greater participation by the private sector and conserve public funds.

Those groups who engage in providing outdoor recreation activities to the public have a responsibility to assure adequate facilities for sanitation and safe use by the public. State and local governmental agencies will have the responsibility of inspection to assure provision of adequate facilities in accordance with State laws or local ordinances.

Private nonprofit associations often assume responsibility for providing certain facilities to their members. Often the association is based on specific specialized activity such as golf, skeet shooting, trap shooting, archery, swimming, or boating. These organizations should be encouraged to continue providing facilities which will satisfy the specialized needs of their members.

Land developers may make valuable contributions to community resources if outdoor recreation is incorporated in planning and development. Some developers now provide certain outdoor recreation facilities such as membership swimming pools, lakes, or open space within housing developments. These features are used to advantage in their promotional programs. Development of these facilities pays dividends in appeal to the buyer and increased property value. Local zoning regulations and policies should encourage recreation and open space planning by developers.

The landscape is the showcase of the State to recreationists and tourists from other parts of the nation. With much of the State in private ownership, maintenance of a high quality landscape must rest primarily with private landowners. Other private groups, such as wildlife clubs, garden clubs, service organizations, etc., working in cooperation with public agencies, should provide the stimulus and leadership in awakening the need for a high quality landscape.

# MAINTENANCE OF THE OUTDOOR RECREATION PLAN

Legislation enacted by the 1964 Mississippi Legislature creating the Mississippi Research and Development Center declared that one of the Center's functions would be "maintaining and disseminating information needed by various development agencies and organizations throughout the State, by industrial and business firms, and by the State."[1] Legislation enacted by the 1966 Mississippi Legislature creating the Mississippi Recreation Advisory Council states in part that:

> The Mississippi Park System in cooperation with the Mississippi Research and Development Center is authorized and directed to supervise the preparation, maintenance, and upgrading of the comprehensive long-range statewide plan for the development of outdoor recreation resources of the State. . . , which will be prepared by the staff of the Mississippi Park System.[2]

As explained in the Introduction, this Plan was prepared under contract with the Mississippi Park System by the Community Development and Planning Division of the Mississippi Research and Development Center. The Mississippi Park System remains responsible for the preparation of the Plan and the Park System will continue to contract with the Mississippi Research and Development Center for plan preparation during the next planning period.

Future planning efforts that require specialized study and are deemed too large in scope to be performed by the Mississippi Research and Development Center planning staff will be subcontracted to another State agency or to a qualified planning consultant selected by the Mississippi Research and Development Center and approved by the State Liaison Officer.

The Five-Year Action Program of the Plan will be updated annually taking into consideration the outdoor recreational needs met during the previous 12-month period, obligated funds available, and anticipated funds and plans of the various State and local agencies. Also, consideration will be given to revising and updating the *Outdoor Recreation Plan* itself as a more complete and accurate document when a more comprehensive supply inventory is required and as better estimates and projections are made of the demand, and consequently, of the needs for recreational opportunities. Changes and developments in the program and responsibilities of various agencies, particularly the State agencies, for providing and developing outdoor recreational opportunity will be considered.

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[1] House Bill No. 213, Mississippi Legislature, Regular Session, 1964.

[2] House Bill No. 646, Mississippi Legislature, Regular Session, 1966.

# CONTINUING PLANNING PROGRAM

During the next planning period, the State proposes to undertake an ambitious planning program. In addition to the annual updating of the Five-Year Action Program and new supply and demand inventories to update the State Plan, the planning program includes several special studies of a vital nature to outdoor recreation in Mississippi. These special studies are: a State Park Development Program, a Comprehensive Policy Coordination and Responsibility Study on State agencies concerned with outdoor recreation, special programs of outdoor recreation development in the State for the mentally and physically handicapped, the very young, the aged and the economically disadvantaged, Study of Outdoor Recreation Needs in Mississippi in urban areas of 2,500 population or more, Scenic Stream Study and a Delta Hardwood Bottomland Study.

A more complete detailed outline of the State's continuing planning program is presented in Table 22.

Table 22

MISSISSIPPI OUTDOOR RECREATION
CONTINUING PLANNING WORK PROGRAM

| Planning Program and Work Elements | Beginning Date | Completion Date | Program Responsibility | Estimated Cost |
|---|---|---|---|---|
| A. PREPARATION OF EXECUTIVE SUMMARY AND PUBLICATION OF PLAN. | 10/1/69 | 12/31/69 | Mississippi Research and Development Center | |
| 1. Publish and distribute final printing of State Comprehensive Outdoor Recreation Plan. | | | | |
| 2. Prepare an executive summary to the S.C.O.R.P. including summary of findings, policies, recommendations and five-year action program. | | | | |
| 3. Publish and distribute executive summary. | | | | |
| B. PREPARATION OF MISSISSIPPI PARK SYSTEM DEVELOPMENT PROGRAM IN OUTDOOR RECREATION. | 1/1/70 | 12/31/70 | Mississippi Research and Development Center | $60,000.00 |
| 1. Conduct annual user surveys in State parks during the summer months to document volume, origin, use, etc. of State parks, to keep abreast of outdoor recreation desires and habits of visitors, ascertain socioeconomic characteristics of users and why they chose to recreate at each surveyed park, and what activities they participated in as well as those they would like to participate in were such facilities available. | | | | |
| 2. Conduct out-of-state visitor counts at each State park, inventory both State and out-of-state use at each State park. | | | | |

Table 22 (Continued)

| Planning Program and Work Elements | Beginning Date | Completion Date | Program Responsibility | Estimated Cost |
|---|---|---|---|---|
| 3. Prepare data on present out-of-state visitation to State parks, by separate parks; determine cut-of-state visitation potential at State parks by planning districts, for next ten years and real potential for State parks to secure such visitation with existing facilities and with improved, modern, expanded facilities; convert varying degrees of potential to monetary flow at State parks. | | | | |
| 4. Inventory existing facilities at each State park, classify condition of facilities and develop cost estimates for improving, modernizing and expanding facilities to meet standards and needs over next ten years. | | | | |
| 5. Relate urban population outdoor recreation needs in State to location of State parks, access, and facilities available and needed; determine urban importance of outdoor recreation facilities as related to the general social well-being of the community and leisure time outdoor recreation values. | | | | |
| 6. Compare available facilities, visitation, operating procedures of State parks to other southern State parks and investigate differing conditions, variances, etc. for establishment of relationship factors; study financial operation of other State park systems, cash flow, concessionaire policies and operations, etc. for applicability to improvement of Mississippi Park System's cash flow and financial condition; also, study budgets and development programs of other State park systems as related to the overall plan. | | | | |

Table 22 (Continued)

| Planning Program and Work Elements | Beginning Date | Completion Date | Program Responsibility | Estimated Cost |
|---|---|---|---|---|
| 7. Evaluate the feasibility of the Mississippi Park System assuming responsibility for operation and maintenance of recreational facilities at reservoirs constructed by Federal and State agencies in Mississippi, including alternative income and expense approaches, estimated revenue to the System generated by alternative approaches, etc. and providing a recommended optimum procedure for the State Park System to follow in evaluating each project, establishing guidelines for State Park/sponsor relationships, responsibilities and operation-management, and maximizing revenue to the State Park System under such arrangement. | | | | |
| 8. Summarize Mississippi Park System's facility development needs; prepare development program including cost of program, recommended financing plan, and investment/development program at each State park; recommend, where deemed applicable, new operating procedures and revenue program for Park System; ascertain projected revenue to Park System from development program and innovative operating procedure; determine new money and tax revenue generated by implementation of program to State and other governmental subdivisions; and develop legislative proposals where applicable. | | | | |
| 9. Prepare summary of study for public dissemination, distribution to legislative and political office-holders, and publicizing. | | | | |
| C. ANNUAL UPDATING OF FIVE–YEAR ACTION PROGRAM OF MISSISSIPPI S.C.O.R.P. | 6/1/70 | 8/31/70 | Mississippi Research and Development Center | $10,000.00 |
| 1. Compile, inventory and revise program of planned outdoor recreation acquisition and development | | | | |

Table 22 (Continued)

| Planning Program and Work Elements | Beginning Date | Completion Date | Program Responsibility | Estimated Cost |
|---|---|---|---|---|
| projects within the State of Mississippi, by planning districts, for the next five years as planned by Federal and State agencies, counties, municipalities and private organizations, including lands, facilities and cost estimates. | | | | |
| 2. Prepare summaries of outdoor recreation; activities, facilities and lands to be provided by planned projects and relate to satisfaction of State's outdoor recreation needs. | | | | |
| 3. Summarize cost estimates of implementing State's Five–Year Action Program. | | | | |
| D. PILOT STUDY FOR UPDATING SUPPLY AND DEMAND INVENTORY. | 9/1/70 | 11/30/70 | Mississippi Research and Development Center | $ 5,000.00 |
| 1. Develop pilot study in selected areas to determine adequacy and accuracy of supply and demand data as contained in S.C.O.R.P. | | | | |
| 2. Develop model for Statewide data updating. | | | | |
| E. COMPREHENSIVE STATE OUTDOOR RECREATION POLICY, COORDINATION AND RESPONSIBILITY PROGRAM; STUDY OF SPECIAL PROGRAMS OF OUTDOOR RECREATION DEVELOPMENT IN MISSISSIPPI FOR THE MENTALLY AND PHYSICALLY HANDICAPPED, THE VERY YOUNG, THE AGED AND THE ECONOMICALLY DISADVANTAGED; STUDY OF OUTDOOR RECREATION NEEDS IN MISSISSIPPI URBAN AREAS OF 2,500 POPULATION OR MORE. | 1/1/71 | 12/31/71 | Mississippi Research and Development Center | $55,000.00 |

Table 22 (Continued)

| Planning Program and Work Elements | Beginning Date | Completion Date | Program Responsibility | Estimated Cost |
|---|---|---|---|---|
| 1. Conduct an in-depth study of all State agencies involved in outdoor recreation with specific consideration being given to establishment of official State policy and responsibility/authority designations and coordination, interagency and interdepartmental relations and coordination; organization, administrative functions and policies, operational procedures, programs and goals, budgeting and financing, etc. | | | | |
| 2. Develop recommendations for efficient, effective and positive actions by the State and State agencies for optimum development, management and operation of outdoor recreation areas/facilities/activities/programs by State agencies. | | | | |
| 3. Development of special outdoor recreation activity programs that could be implemented by the State, counties or municipalities for the above special groups. | | | | |
| 4. Development of special facilities at existing outdoor recreation areas that would expand use by and accommodate the needs of the above special groups. | | | | |
| 5. Development of special outdoor recreation areas oriented toward the above special groups for implementation by various governmental agencies in areas of high group concentrations within the State. | | | | |
| 6. Review of active Federal financing programs aimed toward assisting development by local and State agencies of outdoor recreation. Areas/facilities/activities/programs for the above special groups. | | | | |

Table 22 (Continued)

| Planning Program and Work Elements | Beginning Date | Completion Date | Program Responsibility | Estimated Cost |
|---|---|---|---|---|
| 7. Prepare recommended implementation program for development of special outdoor recreation areas/facilities/activities/programs by the State, counties and municipalities, distribute to all applicable State agencies, county and city governments and provide technical assistance to the governmental agencies in implementing the recommended program for providing outdoor recreation opportunities to the above special groups. | | | | |
| 8. Analyze supply, demand and needs in each city of the State over 2,500 population for outdoor recreation areas/facilities/activities. | | | | |
| 9. Determine special problems of the cities in providing outdoor recreation facilities and prepare action programs, including technical assistance by State and Federal agencies, for supporting development of outdoor recreation facilities in the cities to meet the cities' needs. | | | | |
| 10. Ascertain sources of financial assistance, direct and indirect, available to the cities and applicability of such assistance to meeting the cities' needs. | | | | |
| 11. Develop alternative financing programs realistically patterned to the cities' needs and conditions. | | | | |
| 12. Prepare and distribute the findings to city governments and the general public. | | | | |
| F. SCENIC STREAM PRESERVATION STUDY | 6/1/71 | 12/31/71 | Mississippi Game and Fish Commission | $15,000.00 |
| 1. Study, locate and designate selected high quality streams in the State which are as yet relatively unaltered. | | | | |

Table 22 (Continued)

| Planning Program and Work Elements | Beginning Date | Completion Date | Program Responsibility | Estimated Cost |
|---|---|---|---|---|
| 2. Make preliminary surveys to define the character quality, recreation potential, scenic, historical, esthetic and other values to be retained in preserving such streams in their natural state, such selected streams to also include the lowland marsh areas. | | | | |
| 3. Evaluate and describe the outdoor recreation potentials of such designated streams in accordance with a recognized classification system developed as part of the study. | | | | |
| 4. Prepare recommendations for preservation of designated streams and other watersheds and recommend courses of legislative, governmental and related action to implement the preservation of such streams in their natural state. | | | | |
| 5. Prepare a report on streams which are selected and classified and a summary of findings and recommendations for public dissemination and legislative action. | | | | |
| G. ANNUAL UPDATING OF FIVE-YEAR ACTION PROGRAM OF MISSISSIPPI S.C.O.R.P. | 6/1/71 | 8/31/71 | Mississippi Research and Development Center | $10,000.00 |
| 1. Compile, inventory and revise program of planned outdoor recreation acquisition and development projects within the State of Mississippi, by planning districts, for the next five years as planned by Federal and State agencies, counties, municipalities and private organizations, including lands, facilities and cost estimates. | | | | |
| 2. Prepare summaries of outdoor recreation; activities, facilities and lands to be provided by planned projects and relate to satisfaction of State's outdoor recreation needs. | | | | |

Table 22 (Continued)

| Planning Program and Work Elements | Beginning Date | Completion Date | Program Responsibility | Estimated Cost |
|---|---|---|---|---|
| 3. Summarize cost estimates of implementing State's Five–Year Action Program. | | | | |
| H. UPDATE SUPPLY INVENTORY AND DEMAND DATA. | 11/1/71 | 5/31/72 | Mississippi Research and Development Center | $60,000.00 |
| 1. Update State Outdoor Recreation Supply Inventory data to determine the adequacy and accuracy of the data. | | | | |
| 2. Update demand inventory data and determine adequacy of demand methodology. | | | | |
| 3. Evaluate updated information and adjust supply and demand data for use in future S.C.O.R.P. and Action planning. | | | | |
| I. MISSISSIPPI DELTA HARDWOOD BOTTOMLAND STUDY. | 4/1/72 | 10/31/72 | Mississippi Game and Fish Commission | $15,000.00 |
| 1. Inventory game habitat in study area and analyze changes occurring in depletion of woodlands for hunting and related outdoor recreation uses in the study area. | | | | |
| 2. Prepare proposed program of action for preserving game habitat areas in the Study Area including such possibilities as legislative proposals, acquisition and development projects, land use zoning, planning, etc., dissemination and publicizing the recommended program for implementation. | | | | |
| J. ANNUAL UPDATING OF FIVE-YEAR ACTION PROGRAM OF MISSISSIPPI S.C.O.R.P. | 6/1/72 | 8/31/72 | Mississippi Research and Development Center | $10,000.00 |
| 1. Compile, inventory and revise program of planned outdoor recreation acquisition and development projects | | | | |

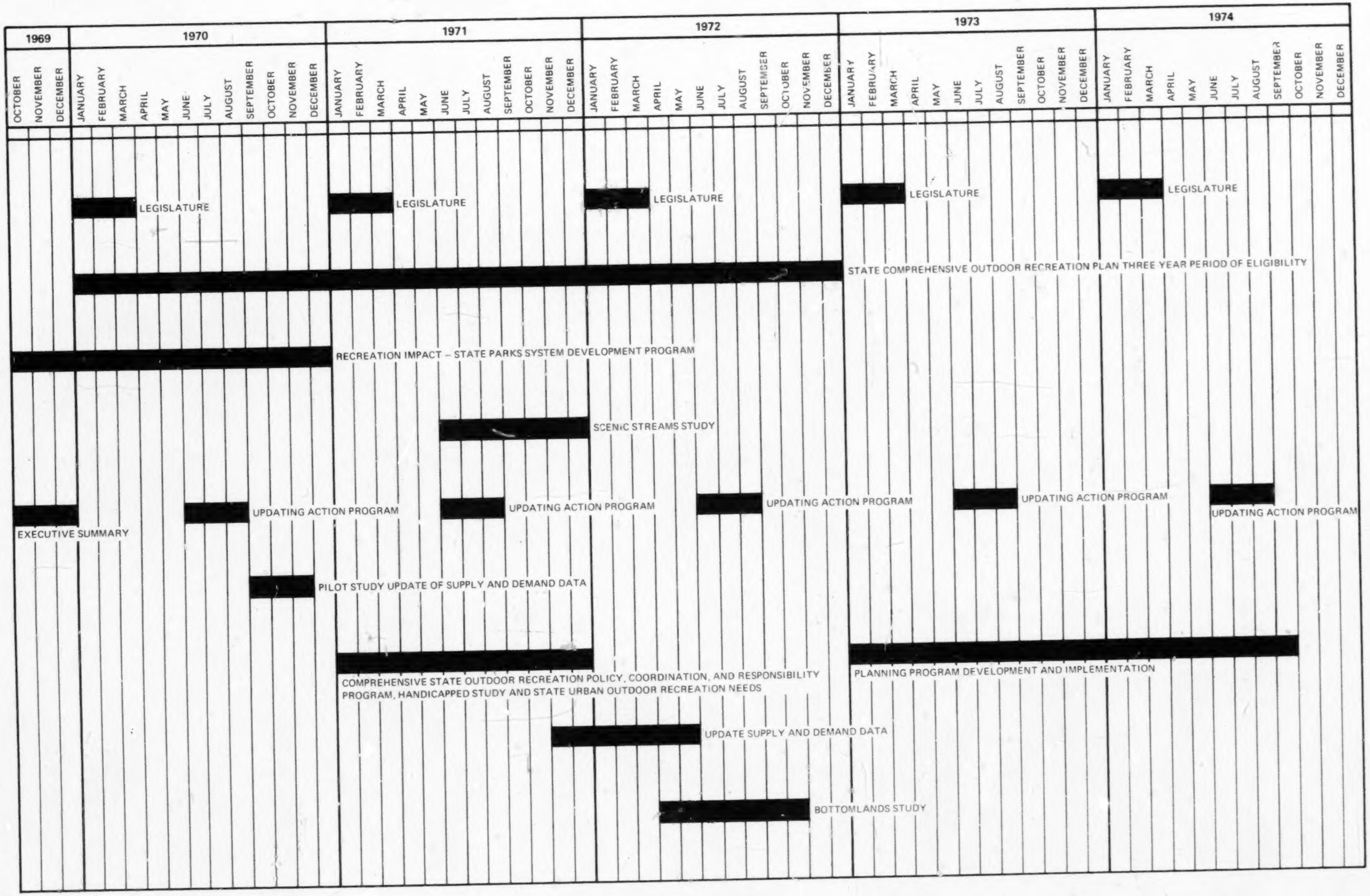
Table 22 (Continued)

| Planning Program and Work Elements | Beginning Date | Completion Date | Program Responsibility | Estimated Cost |
|---|---|---|---|---|
| within the State of Mississippi, by planning districts, for the next five years as planned by Federal and State agencies, counties, municipalities and private organizations, including lands, facilities and cost estimates. | | | | |
| 2. Prepare summaries of outdoor recreation; activities, facilities and lands to be provided by planned projects and relate to satisfaction of State's outdoor recreation needs. | | | | |
| 3. Summarize cost estimates of implementing State's Five–Year Action Program. | | | | |
| K. ANNUAL UPDATING OF FIVE–YEAR ACTION PROGRAM OF MISSISSIPPI S.C.O.R.P. | 6/1/73 | 8/31/73 | Mississippi Research and Development Center | $10,000.00 |
| 1. Compile, inventory and revise program of planned outdoor recreation acquisition and development projects within the State of Mississippi, by planning districts, for the next five years as planned by Federal and State agencies, counties, municipalities and private organizations, including lands, facilities and cost estimates. | | | | |
| 2. Prepare summaries of outdoor recreation; activities, facilities and lands to be provided by planned projects and relate to satisfaction of State's outdoor recreation needs. | | | | |
| 3. Summarize cost estimates of implementing State's Five–Year Action Program. | | | | |

Table 22 (Continued)

| Planning Program and Work Elements | Beginning Date | Completion Date | Program Responsibility | Estimated Cost |
|---|---|---|---|---|
| L. ANNUAL UPDATING OF FIVE–YEAR ACTION PROGRAM OF MISSISSIPPI S.C.O.R.P. | 6/1/74 | 8/31/74 | Mississippi Research and Development Center | $10,000.00 |
| 1. Compile, inventory and revise program of planned outdoor recreation acquisition and development projects within the State of Mississippi, by planning districts, for the next five years as planned by Federal and State agencies, counties, municipalities and private organizations, including lands, facilities and cost estimates. | | | | |
| 2. Prepare summaries of outdoor recreation; activities, facilities and lands to be provided by planned projects and relate to satisfaction of State's outdoor recreation needs. | | | | |
| 3. Summarize cost estimates of implementing State's Five–Year Action Program. | | | | |
| TOTAL ESTIMATED COST | | | | $260,000.00 |

## MISSISSIPPI OUTDOOR RECREATION CONTINUING PLANNING WORK PROGRAM
## 1970 – 1974



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